ANTHROPOLOGICAL RECORDS
14:6

CHANGING WASHO KINSHIP

BY

STANLEY A. FREED

UNIVERSITY OF CALIFORNIA PRESS
BERKELEY AND LOS ANGELES
1960

[Title Page]

CHANGING WASHO KINSHIP

BY

STANLEY A. FREED

ANTHROPOLOGICAL RECORDS
Vol. 14, No. 6

[Introductory, p. i]

Tr:Freed E-5 (1952-1957)1960 NT20 Washo NT20

UNIVERSITY OF CALIFORNIA
ANTHROPOLOGICAL RECORDS

Editors (Berkeley): J. H. Rowe, R. F. Heizer, R. F. Murphy, E. Norbeck
Volume 14, No. 6, pp. 349-418, 8 figures in text,
22 graphs

Submitted by editors June 26, 1959
Issued February 5, 1960
Price, $1.50

University of California Press
Berkeley and Los Angeles
California

Cambridge University Press
London, England

[introductory p. ii]

Manufactured in the United States of America

CONTENTS

Introduction 349

I. The Washo Indians 350

II. Washo social organization 353

III. Alternate terms and role behavior 363

Conclusion 371

Appendixes

I. Statistical analysis: tables of means, standard errors of the means, and 95 per cent confidence limits 379

II. Statistical analysis: comparison of roles 387

III. Role profiles 394

IV. Graphs of the sixteen categories of role behavior 405

Bibliography 417

[Introductory p. iii]

[P.349, A]

CHANGING WASHO KINSHIP

BY

STANLEY A. FREED

INTRODUCTION

121 This paper presents a study of Washo social organization and of the changes which have occurred within it since the end of the aboriginal period. It is particularly concerned with discovering the causes of a number of alternate kinship terms which together appear to constitute a new, emerging system of kinship terminology. The hypothesis here advanced to account for the alternate kinship terms is that changes occuring outside of social organization can affect the terminological system without first modifying elements of formal social structure, such as residence rules or rules of descent. This hypothesis is based on the assumptions that kinship terminology is closely correlated with patterned norms of behavior, or roles, and that these roles may vary considerably within the limits set by a given kind of social organization. Cultural changes can therefore cause terminological change by altering role behavior without affecting the formal social structure.

121 125 In order to test the assumption of a close correlation of role behavior and kinship terminology, I have devised a technique, called the role profile test, which yields an objective description of role behavior. The data from the role profile test show that Washo role behavior agrees closely with the emerging system of kinship terminology. The close correlation of role behavior and terminological system and the occurrence of changes in the Washo system of kinship terminology despite a relatively stable social structure support the hypothesis that roles may vary markedly within the limits set by a given type of social structure, the variation being due to causes which lie outside of social organization.

114 The study is based on six months of field work among the Washo living in Carson City and Dresslerville, Nevada, and Woodfords and Markleeville, California. Four trips were made: during the first two,

[P.349, B]

CHANGING WASHO KINSHIP

BY

STANLEY A. FREED

INTRODUCTION

114 in the summers of 1952 and 1953, an attempt was made to add to the data on aboriginal Washo culture; during the last two, in the summer of 1956 and the winter of 1956-57, Washo social structure and kinship terminology were intensively investigated to determine if they had changed appreciably as a result of white contact. My wife assisted me on these last two trips.

000 I am indebted to a number of people for their help and encouragement. Professor Edward Norbeck, chairman of my thesis committee, introduced me to the study of kinship and has closely guided both my field research and the writing of this report. Professor David M. Schneider pointed out to me the usefulness of the role concept in the study of kinship and social structure. The hypothesis here proposed to account for the Washo kinship data was derived from the articles by Schneider and Homans (1955) and Schneider [127] and Roberts (1956) and was elaborated and discussed in several long conversations with Dr. Schneider. Professor Mary R. Haas read the manuscript several times and offered a number of suggestions and criticisms. My thanks are also due Professor Josephine Miles and Martin A. Baumhoff, who read and criticized the manuscript. Professor Evelyn A. Fix suggested [128] the statistical analysis used in this study, and the section on statistics was written under her supervision. [104] Any errors of calculation or interpretation are, of course, the responsibility of the author. Unless otherwise noted, Washo words are written in a phonemic system developed for Washo by William H. Jacobsen, Jr., who did his work under the Survey of California Indian Languages, Department of Linguistics, [122] University of California, Berkeley. Mr. Jacobsen advised me on all linguistic matters. The field research was supported by the Department of Anthropology, University of California, Berkeley.

[P.350, A]

I. THE WASHO INDIANS

This chapter is a brief summary of what is known 121
of aboriginal Washo culture, except for social organi-
zation, together with the principal changes it has un-
dergone since the coming of the whites. The most sig- 177
nificant characteristic of Washo acculturation from the 178
point of view of this study has been the progressive
individualization of the society. This can be seen most
clearly in their economic life, where the old, coöpera- [433]
tive methods of earning a livelihood have given way to
individual wage work. The trend toward individualism [464]
has also affected ceremonial. The major ceremony of
the year, the pine-nut dance, has been given up; and [535]
curing is less a group affair than it once was, with
the exception of the peyotists, who constitute approxi- [795]
mately ten per cent of the tribal membership. War-
fare, another activity requiring group coöperation, was
abandoned shortly after the coming of the whites. The [726]
effects upon social organization of this trend toward
individualism will be traced in the following chapters.

INFORMANTS

The sketch of Washo culture which follows is based primarily upon the sources listed below and upon data which I gathered directly in the field. My principal informants were the following: Nancy Emm, Clara Frank, Bertha Holbrook, and Hank Pete, all of Dresslerville, Nevada; Roy James, Woodfords, California; Caesar John, Markleeville, California; and Henry Rupert, Carson City, Nevada. 115

SOURCES

Ethnographic accounts of the Washo are few. The principal ones are by Barrett (1917), Curtis (1926), and Lowie (1939). Stewart (1944) and Siskin (MS) have contributed two excellent studies of Washo peyotism, and Kroeber (1907) has published a brief sketch of the Washo language, which contains a list of kinship terms. Other major sources are Dangberg's (1927) collection of myths, Kroeber's (1925) brief summary of the then available data on Washo culture, Stewart's (1941) list of cultural elements, and Heizer and Elsasser's (1953) study of the archaeology of the central Sierra Nevada. 114

LOCATION

The Washo Indians are a small, isolated group who 131 [197]
speak a language tentatively placed in the Hokan stock [101]
(Sapir, 1929, p. 139). In aboriginal times they occupied
the extreme western edge of Nevada and eastern Cali-
fornia. The eastern part of their territory lay in the
Great Basin and the western part in the Sierra Nevada.
Aboriginal Washo territory extended from Honey Lake
in the north to Sonora Pass in the south. The eastern
boundary ran from Sonora Pass northward along the
crest of the Pine Nut Mountains; it then turned west

[P.350, B]

I. THE WASHO INDIANS

passing just west of Virginia City; then north to a point a few miles east of Reno, and from there northwest to Honey Lake. The western boundary followed the crest of the Sierra Nevada. Lake Tahoe and the eastern half of Sierra Valley were in Washo territory, as were the modern towns of Woodfords, Truckee, and Loyalton, California; and Reno, Carson City, Minden, and Gardnerville, Nevada (Barrett, 1917, pp. 5-7; Curtis, 1926, pp. 87, 89; Kroeber, 1925, pp. 569-570; Lowie, 1939, p. 301; Merriam, MS; Siskin, 1938, pp. 626-627; Stewart, 1966, p. 66). 131

POPULATION

Estimates of the aboriginal population vary considerably. Kroeber (1925, p. 570) gives the total in pre-white times at possibly 1,500. Mooney estimates 1,000 Washo in 1845, the date he considers to mark the end of the aboriginal period. Mooney believes that the Washo population had fallen to 300 by 1907 (1928, p. 20). This last figure differs markedly from Curtis' estimate of 800 Washo only three years later in 1910 (1926, p. 91). The Washo tribal secretary, Ronald James, estimates the present-day Washo at 850. Many of them have moved to the cities; probably no more than 600 remain within the boundaries of what was formerly Washo territory. 161

GEOGRAPHICAL DIVISIONS

There are three geographically distinct groups of Washo. Those living north of Carson City, Nevada, are called wélmeltiʔ. Washo living in the Carson Valley are called pá·waʔluʔ, and the California Washo are called háŋaleltiʔ, with the present California-Nevada border being the approximate dividing line between these last two groups (Simpson, 1876, pp. 93-94; Curtis, 1926, p. 90). I know of no cultural differences between these two groups, but the wélmeltiʔ are said to differ from the other two by their slow manner of speech. In the spring and summer, when the Washo moved up to Lake Tahoe, the wélmeltiʔ camped mainly around the northern half of the lake from McKinney around to Glenbrook. The pá·waʔluʔ lived on the western side of the lake south of McKinney, and the southern and eastern lake shore was mixed háŋaleltiʔ and pá·waʔluʔ. However, any family was free to camp anywhere around the lake. 619 361 221 619

SEASONAL MIGRATIONS

The Washo were migratory hunters, fishers, and gatherers. A family usually spent the winter in the Pine Nut Mountains. In the spring, the able-bodied men and women went to Lake Tahoe to fish. The rest of the family moved into the great valleys east of the Sierra Nevada where they searched for roots, grass seeds, birds, birds' eggs, and berries. From time to time, someone who had gone to the lake would carry 221

221

a load of fish back to the valley to help feed those who had been left behind. In the fall, groups of Washo would travel into California to gather acorns. These trips frequently took them as far west as Placerville. The Washo then returned to the Pine Nut Mountains for the pine-nut season. In the years when there was no crop of pine nuts, a family might choose to winter at Lake Tahoe or in one of the valleys east of the Sierra Nevada.

The Washo no longer lead a migratory life. The 221
shores of Lake Tahoe are now privately owned, and
the Washo may not fish there. They still obtain acorns 178
from California, but they no longer have to travel in
groups for protection. The trip takes only a day or [177]
two in an automobile and may be made by an individual
or a single family. The only noteworthy survival of the old seasonal migrations is the fall trip to the Pine Nut Mountains to hunt deer and gather pine nuts. Many families, especially those headed by older people, still spend a month or longer in the Pine Nut Mountains.

ECONOMIC LIFE

The major game animals were deer, antelope, and 224
rabbit. Deer could be hunted individually or communally. The leader of the communal deer hunt was a secular officer; that is, he did not derive his authority [624]
from dreams (Lowie, 1939, p. 324). He divided the hunting party into two groups. One group built fires and drove the deer toward the other hunters who were lying in ambush with bow and arrow. The captured deer were divided among all who participated in the
hunt. Deer provided, in addition to food, hides for [237]
clothes and sinews for use in the manufacture of bows [291]
and arrows.

Deer could be hunted by small parties of four or [411]
five men. When pursued, deer follow a certain route; and as the Indians knew which way the animals would go, some of them chased the deer while others took a short cut and lay in wait. Disguises consisting of the horns and hide of a deer were sometimes used to approach a herd of deer and lure them close to a group of concealed hunters (Curtis, 1926, pp. 94-95).

Deer remain a fairly important item of food for
the modern Washo. Today deer are hunted by indivi- [178]
duals armed with rifles; the old, coöperative methods of deer hunting are no longer practiced.

Antelope were hunted by a technique known as ante- 224
lope charming. The leader of the antelope hunt re- 624
ceived his power through dreams. He communicated 756
with the animals in his dreams and told them not to be afraid of him. When antelope were sighted, the Washo built a corral of sagebrush. The antelope charmer approached the herd and talked to them, gradually leading them into the corral. This was accompanied by a slow drive by the rest of the Indians. Once the antelope were inside the corral, the Washo rushed upon them and killed them with clubs and bows and arrows. The animals were divided among all the
hunters. This method of hunting must have disappeared [182]
very early, for no antelope chief was living in 1926 (Lowie, 1939, p. 324).

Rabbits were hunted by a communal drive under the 224
leadership of a secular rabbit chief. This officer was 624
distinct from both the leader of the deer hunt and the
antelope charmer. According to Barrett (1917, p. 12), [NQ]
he was a hereditary officer; according to Lowie (1939,

[P.351,B]

p. 363), an elected official. As many as 300 Indians 224
might take part in a rabbit drive. The rabbits were 624
slowly driven into long nets. During the drive, they [114]
were shot with bows and arrows or killed with clubs.
Those which evaded the drivers were usually trapped [411]
in the nets, where waiting Indians killed them by wringing
their necks or squeezing their temples. Care had [777]
to be used not to break the net and cause bad luck for
the hunters (Barrett, 1917, p. 12). Rabbits provided
food, and their skins were used to make rabbitskin
blankets. Rabbits have remained a rather important [513]
food for the Washo, and rabbitskin blankets are still
used by a few older Washo. [237]

Today, rabbits are hunted individually or in a kind
of drive which consists of a line of men moving through 224
the sagebrush, shooting the flushed rabbits with shotguns. 178
Nets are no longer used. Another modern hunting
method which is popular among the younger men is to
shoot rabbits from an automobile.

The principal seeds used as food were acorns and 262
pine nuts. Acorns did not grow in Washo territory. [222]
They were gathered in California and carried back in
large, twined burden baskets. The acorns were shelled,
pounded to flour on permanent bedrock mortars, leached 252
with hot water, and made into soup. Another popular
way to prepare acorns was to pour a thick acorn mush
into cold water, thus forming jellylike balls about the
size of a fist. The preparation of acorn meal by the [121]
Washo closely resembles the practices of the adjacent
Californian tribes.

Pine nuts were the most important single food of 262
the Washo. They were eaten throughout the winter and 535
stored from year to year. The pine-nut season was
preceded by a dance lasting four days. This was the 574
largest social gathering among the Washo. During
these four days, they danced, played games, and
prayed for a good crop. While dancing, the Washo
carried the tools used to gather and prepare pine nuts:
the hooked pole, burden baskets, mano and metate,
and the paddle for stirring mush. The most prominent
feature of the pine-nut dance was the continual round
of games and races, accompanied by heavy gambling. [525]
After the last night's dancing, the chief made a speech
exhorting people to treat children and the aged with [527]
kindness and to be good to their wives. Then they
bathed in a stream and scattered to their pine-nut
plots (Curtis, 1926, p. 95). Pine nuts were ground to [252]
flour and made into soup.

The Washo still make considerable use of pine nuts
and acorns. Most of the traditional implements used in 262
their preparation have been retained: mortar, mano 178
and metate, burden baskets, hooked pole, and the
various winnowing baskets. Although acorns and pine
nuts are widely eaten, they cannot now be considered
staple items in the Washo diet, which consists largely [177]
of modern American food.

Fish were the most important summer food for the 226
Washo. They obtained most of their fish from the streams
draining into Lake Tahoe. The importance of fish in the [262]
Washo economy is indicated by the variety of fishing techniques:
they could be harpooned, taken in conical traps of
basketry, or captured by drives into nets or stone dams
erected at suitable places in a stream. None of the aboriginal 226
fishing techniques survive today. All fishing is
with rod and line and is therefore individualistic as opposed 178
to many of the aboriginal coöperative methods.
In fishing, as in hunting, there has been a steady shift
from coöperative to individual activity.

[P.352,A]

In spite of the moderate number of hold-overs from 464
the old economic system, the economic base of modern 178
Washo life has changed considerably since the 1850's.
Today, the Washo live primarily through wage work
on surrounding ranches and in the towns. The men are
mainly unskilled laborers, although a few have trades
and earn a good living. One man has grown wealthy in
the lumber business. Women work as domestic ser-
vants, as dishwashers in restaurants, or in laundries.
But women do not work unless they must, and they
spend most of their time at home caring for their
families. Most of the aboriginal survivals are in the [434]
female sphere of activity, for women can add consid- [439]
erably to the family income by preparing pine-nut
and acorn flour and by weaving baskets for sale. The 888
older people have pensions or receive social security
payments and are economically independent of their 178
children. Washo material culture is entirely American 745
except for the items mentioned above and a few others.
They now live in permanent settlements resembling 177
small, American towns. The largest of these, Dress- 361
lerville, Nevada, has a population of 195. This is far [162]
larger than the number of individuals who lived to-
gether in prewhite settlements.

CEREMONIES OF THE LIFE CYCLE

846

A number of practices were formerly associated
with childbirth. The mother ate no meat or salt for
a month after the birth; the father observed the same
taboos until the baby's umbilical cord fell off; and un-
til the loss of the cord, husband and wife were for-
bidden sexual intercourse. Ceremonies involving the [431]
distribution of gifts marked the return of the father
and mother to normal life, the former when the infant
lost its umbilical cord and the latter a month after
the birth.

Most of the customs surrounding birth are no longer 844
observed. Some women still observe the food taboos; 846
but if they have their babies in the government hospi-
tal, they generally eat meat when it is served. Often 178
the doctors and nurses insist upon it. The men have
given up all their previous observances. The custom
of distributing presents following the birth of a baby [431]
is still maintained. It usually takes place two weeks
after the birth and seems to be a merging of two abo-
riginal ceremonies: the one at the time of the detach-
ment of the umbilical cord, and the second, when the
mother is freed of all restrictions a month after the
birth. The modern ceremony is called the "baby feast." 881

The girl's puberty rite or "dance," as the Washo
call it, was the most elaborate of all the ceremonies
of the life cycle. It lasted four days, and the Washo
say that during this period the girl was "shaping her
life." The principal features of the ceremony were:
(1) the girl fasted four days and abstained from meat [785]
and fish for one month; (2) she worked very hard so [262]
as not to be lazy in later life; (3) on the fourth night,
the girl climbed a mountain where she lit four fires;
(4) she then raced a nonrelative back to the foot of the
mountain, care being taken that she always won the
race; (5) the girl danced until dawn on the fourth night
of the ceremony and was then bathed. The entire cere- [841]
mony was repeated when the girl had her second menses.

The puberty ceremony for girls is still held. In my [178]
interviewing, I have found very few women who had
not had a "dance." Each woman who had not had a

dance gave a reason for its omission, such as her attendance 881
at a government boarding-school. In general, 178
the ceremony is scrupulously observed. The modern
ceremony is a modified version of the old one. The
girl no longer climbs a mountain; she climbs a small
hill. An automobile is waiting for her when she returns;
she wears her slip when she is being bathed
instead of being naked as was formerly the custom;
she abstains from meat for only two weeks instead of
a month; the second dance is usually omitted. Yet the
essentials of the ceremony are maintained; and this is
in the face of the teasing to which the Indian girl is [648]
exposed from her white schoolmates, for the public
puberty ceremony makes her a conspicuous social object
at the time of her first menses.

Marriages were celebrated with a minimum of ceremony. 584
The most desirable Washo marriage was one 583
arranged by the parents of the bride and groom. Such
a marriage was preceded by an exchange of presents.
To refuse a present was to reject the prospective
bride or groom. Following the exchange of gifts, the 585
new couple began to live together without further ceremony
(Curtis, 1926, p. 97; Lowie, 1939, p. 308). The
exchange of presents was optional, and occasionally a
boy and girl would live together without the benefit of
parental arrangements (Barrett, 1917, p. 9; Lowie, 1939,
p. 308). Perhaps arranged marriages were never very 585
frequent or else the custom began to die out very early, 178
for in my interviews I found only two arranged marriages
out of a total of forty-eight. Today, most people
marry in the "tribal" manner, that is, they just begin
to live together. Even those few who have purchased
marriage licenses usually neglect to go to a justice of [177]
peace to complete the ceremony officially.

Curtis (1926, p. 97) says that the dead were formerly 764
cremated. Lowie (1939, p. 310) and Barrett (1917,
p. 9) confirm this but add that, by the time they studied
the Washo, burial had replaced cremation. Following
cremation, the Washo collected the bones of the dead
person and placed them in a creek. The clothes and
personal property of the deceased person were burned [768]
or hidden and the house he used was abandoned. The
old men and women cut their hair and mourned for [765]
three months (Lowie, 1939, p. 310).

Modern funerals retain many Indian practices. Chief [302]
among them are the customs intended to make sure
that the ghost of the dead person does not return to 764
trouble the living. Before the body is lowered into the 178
grave, an old man steps forward and makes a speech
instructing the ghost to stay away. All of the dead 175
person's property that can be buried is interred with [537]
him. Personal property must be destroyed, for this
is the "road" by which the ghost of the dead can return [768]
and trouble the living.

RELIGION AND CURING

The shaman was the principal religious figure. He 756
possessed supernatural power (wegeléyu) which he received
in dreams and which he learned to control during
an apprenticeship of several years under an experienced
shaman. A shaman could use his power either
to cure sickness or to kill. Supernatural power could [754]
come from the deer, rattlesnake, "water-baby" (a [776]
small, white, manlike creature which lived in streams,
springs, and lakes), bear, and eagle. The Washo call [192]
both the sources of power and the power itself wegeléyu.

756 The word also denotes the implements used in curing.
[192] A curing ceremony usually lasted four nights although
it was sometimes reduced to two. The rites
755 were the same each night. For the first three nights,
756 the shaman would stop around midnight; on the final
night he continued until dawn. The shaman's techniques
consisted largely of smoking, singing the songs he had
received from his wegeléyu, praying, and finally sucking
out the cause of the disease. This might be an
insect, a pine nut, a small piece of bone, or some
756 other small object. The shaman's paraphernalia included
a rattle, a straight stone pipe, and, for at
least one shaman, a bone whistle.

Two shamans were active among the Washo as recently
as a few years ago. Today, only one remains
178 alive, and he is an old man. When he dies, shamanism
668 will disappear. Modern Washo medicine is a mixture
of shamanism, white medicine, and curing through
756 peyote meetings. Any or all remedies may be tried
by a particular patient. The older people are reluctant
to go to the government doctor, for they have a
fear of being placed in the hospital. They tend to patronize
the shaman and the peyote cult in preference
to the white doctor. The peyotists, though sincere believers,
also recognize the powers of the shaman and
the white doctor and readily patronize either of them.
[178] The younger people, however, prefer modern medicine;
and it is steadily displacing the other two methods of
curing.

POLITICAL ORGANIZATION AND LEADERS

361 Washo political organization was extremely simple.
Settlements were minute; Lowie's informants said that
they usually had only two to four huts (1939, p. 303).
Each settlement was politically independent. Washo
622 informants report the presence of tribal chiefs, but
[114] Lowie thinks that this was probably a recent development
(1939, p. 303). The chief's sole function was to
arrange dances and to make speeches exhorting the
Washo to be good and to behave properly. Special
624 headmen led the communal antelope, deer, and rabbit
[224] hunts. The antelope chief received his power in dreams;
[787] the other two hunting chiefs were secular officers.

The political organization of the modern Washo is
178 more complex. They have adopted a written constitution
and they elect a tribal council. Yet this new complexity
623 is largely nominal, for the council exercises
642 little real power and each family does pretty much as
it pleases. The chief responsibilities of the council
are to manage the small amount of tribal property
and to maintain the water supply in Dresslerville,
Nevada. Though these are relatively simple matters,
[578] the council handles them quite ineptly. Factional fights
and personal antagonisms block any really effective
[887] council action. The older people, who run the council,
seem incapable of dealing with the important problems
which face the modern Washo; and the younger people
appear to take little interest in council affairs. In
short, the Washo have not yet developed an effective
political organization.

WARFARE

203
211 Warfare seems to have been waged under the leadership
622 of any renowned fighter. The leader collected his
721

721
band by sending a messenger around the country carry- 622
ing a knotted cord (baʼló·go). The knots represented [203]
the number of days remaining until the persons who
wished to take part in the fight were to gather at the [211]
place of assembly, and the messenger untied one knot
every day so as to keep track of the time that remained.

After the warriors had assembled, they engaged in 721
a war dance which lasted four or eight nights. During
this period, they manufactured bows and arrows. The 535
arrows were smeared with rattlesnake poison obtained
by letting a rattlesnake strike a piece of deer meat. [411]
The war dance was a kind of test and training for war-
fare. A man demonstrated by vigorous dancing that he [825]
was strong and fit to go to war; and the dance itself
consisted of sudden, jerking movements as if one were
dodging arrows. The war dance resembled the pine-nut
dance in that features of both dances imitated the com-
ing activities: in the war dance, men danced with bows
and arrows and acted as if they were at war; in the
pine-nut dance, people carried their implements for
gathering and cooking pine nuts. Several taboos were
observed during the period of the war dance: (1) men [834]
and women were forbidden sexual intercourse; (2) war-
riors could not eat meat and salt; (3) pregnant women [262]
could not throw their shadows on men engaged in dan- [263]
cing and they could not touch the bows and arrows.

Shamans who accompanied the war party served two [843]
functions: they called on their supernatural power to
keep the enemy and his dogs asleep during the assault; 726
and since they were specialists in herbal medicine,
they treated the wounded. The shamans also selected 756
the night for the attack. While the Washo were sur- 789
rounding the enemy camp, the shamans became very
intent on their praying so that none of the enemy should
awake. The Washo then entered the camp of the enemy,
set fire to their huts, and killed them with clubs and
arrows as they emerged. Everyone was killed, even
small babies.

When the Washo returned, they had a dance which 727
lasted two or four nights. Lowie reports that men and
women danced over the capture of the scalp of the
enemy regarded as the best fighter. The scalp was
tied to the top of an eight-foot, peeled, willow pole,
which everyone except young girls seized and shook.
The people finally burned the hair of the scalp and
then went home (Lowie, 1939, pp. 329-330). My infor-
mants omitted mention of the scalp, but said that an
important feature of the dance after the fighting was
a ritual bath. This was necessary before the warriors [783]
could eat or have intercourse with their wives. The
Washo apparently were militarily superior to the Mi- 726
wok and the Maidu on the west, but they found the
more numerous Paiute on their eastern border more
formidable opponents. The fact that the Paiute obtained [231]
horses earlier than the Washo would also have given
the Paiute some superiority in warfare.

SUMMARY

Aboriginal Washo culture may be thought of as a 171
blend of Californian and Great Basin cultural traits
Heizer and Elsasser (1953, p. 4) note the following
ties with California:

> . . . the conical dwelling made by piling up bark
> slabs; semi-subterranean assembly house; "com-
> munity" or bedrock mortar; emphasis on coiled

[P. 354, A]

basketry decorated with named geometric patterns; language affiliation; soaproot meal brush; looped withe hot rock lifter; flat mush stirring paddle; hopper-mortar; feather-decorated coiled basketry. 171

Certain traits link the Washo with the Great Basin area (Heizer and Elsasser, 1953, p. 4):

> . . . long net for catching rabbits by driving technique; special "boss" for rabbit and deer hunt; rabbitskin blanket; heavy dependence for food on nuts of piñon (Pinus monophylla) with the complex of implements and activities used to secure and prepare these (hooked pole, roasting of nuts, carrying baskets); mano and metate; twined basketry techniques and basket forms (e.g., winnowing trays); temporary brush house; antelope hunting method by "charming"; private ownership of clumps of piñon trees.

Modern Washo culture is largely western American with a moderate number of aboriginal hold-overs. The 177 178

[P.354, B]

177
178

old, prewhite culture survives most strongly in language, ceremony, and, as we shall see in the next chapter, social structure. The most important change with reference to this study has been the lessening of coöperative activity. This trend has progressed farthest in economics. Although the economic unit has always been the nuclear family, aboriginal economic activity emphasized group coöperation much more than it does today. The modern Indian works for wages; he is part of the larger society where economic activity is impersonal and one's coworkers may be relative strangers. If an Indian family so chooses, it can be economically independent of relatives and friends. This same trend is visible to a lesser extent in ceremonials. The prewhite curing ceremony was a group affair; but modern, white medicine is essentially a relationship between doctor and patient. There is no longer a large group of friends and relatives standing by to lend moral support. Some ceremonies, such as the pine-nut dance, have disappeared completely.

[594]
[465]
[464]
[755]
[602]
[535]

II. WASHO SOCIAL ORGANIZATION

A number of changes have taken place in Washo 178
social organization since the end of the aboriginal [595]
period: the form of marriage has changed from nonsororal
polygyny to monogamy; the system of kinship
terminology is apparently changing, as indicated by [601]
the existence of a set of alternate kinship terms; the
sororate and levirate have been abandoned; and a [587]
weak system of agamous moieties has been lost. Other [616]
elements of social organization appear to have been
fairly stable, e.g., rule of residence, patterns of descent [591]
and inheritance, and form of the family. [611]

The analysis of Washo social organization given in
this chapter is based on the investigations of Barrett
(1917), Curtis (1926), Kroeber (1907; 1917), Lowie [428]
(1939), and Siskin (MS), and upon the following kinds
of data which I gathered in the field. First, the most 12
reliable elderly informants were intensively interviewed
about all aspects of social organization both past and
present. Second, kinship schedules were obtained from
seventy informants ranging in age from ten to over
eighty. In addition, brief life histories and census data 128
were collected in the course of the genealogical interviews.
The life histories provided information on forms
of marriage. Residence rules were determined both
from the census material and from the life histories,
since both kinds of data are necessary to establish
residence rules adequately (Fortes, 1949; Goodenough,
1956; [illegible] 1955). Finally, sociometric data using
family [illegible] patterns as the criterion were collected
with the thought that, if any incipient unilineal kinship
groups were present, they might be discoverable from
the pattern of interfamily visiting.

The methods used to determine change in social 128
organization were the same as those used by Bruner 178
(1955), Eggan (1937), Gough (1952), Nett (1952),
Schmitt and Schmitt (n.d.), and Spoehr (1947). The
writings of earlier investigators and interviews with
older informants supplied information on changes in
residence rules, kinds of kinship groups, and forms
of marriage. Changes in the system of kinship terminology 601
were determined by comparing the variant 128
usages contained in the large sample of modern kinship
schedules with what was thought to be the aboriginal 178
Washo kinship terminology. For the Washo, the
aboriginal terminology may be established with relative
confidence because the early kinship schedules
collected by Kroeber (1907; 1917) and Lowie (1939)
agree closely with each other and with the terminological
system used by the majority of modern Washo.

Terminological change has a restricted meaning
here. It refers only to changes which result in a new
type of terminological system. Since the widely used
classifications of kinship systems are based on the
consanguine relatives of ego's generation and the first
ascending and first descending generations (Spier,
1925; Lowie, 1928; Murdock, 1949), a change in the
nomenclature of cousins or aunts and uncles is significant
whereas change in terms for grandparents' siblings
or affinal relatives is not significant. The genealogical [124]
interviews conducted in this research dealt
primarily with relatives critical in defining the type
of kinship terminology.

[P.355, B]

II. WASHO SOCIAL ORGANIZATION

601
128

The classification of kinship systems used in this study is the one proposed by Robert H. Lowie (1928). On the basis of the terminological usages in the parental generation, he defined four types of kinship systems: generation, bifurcate merging, lineal, and bifurcate collateral. In generation terminology, one term is used for all male relatives and another term for all female relatives in the parental generation. In bifurcate merging terminology there is a single term for father and father's brother and a single term for mother and mother's sister, but father's sister and mother's brother have separate terms. The lineal type of terminology distinguishes father from father's brother and mother's brother (who are designated by a single term) and mother from mother's sister and father's sister (who are also referred to by a single term). Bifurcate collateral terminology has six distinct terms for parents and their siblings. Lowie's four types "can be applied to any trio of kinsmen in the same generation and of the same sex, provided the second is a collateral relative of the first in the same line of descent and the third is related to Ego in the same manner as the second except for a difference in the sex of the connecting relative" (Murdock, 1949, p. 142).

THE TERMINOLOGICAL SYSTEM

The standard or aboriginal Washo kinship terminology is given in table 1 (pp. 356-357). The standard terminology is still used by the majority of modern Washo. It is a generation type of terminology in ego's generation and a bifurcate collateral type in the first ascending and first descending generations.

The morphophonemic analysis of kinship terms in table 1 is by William H. Jacobsen. The first column lists a number for each term; these numbers are the same as the ones used in the diagram of the standard Washo consanguineal kinship system appearing on figure 1. The second column gives the English translation for each term. The third column presents the singular form with the prefix indicating first person possessive. The final column gives the morphophonemically basic form of the stem. If the stem is preceded by a hyphen, this indicates that it must always take a possessive prefix even if the possessor is indicated by a preceding noun or independent pronoun. The terms are given in approximately the order used by Lowie (1939).

601

All cousins are called older and younger brother or sister depending upon whether ego's parent is older or younger than the parent of ego's cousin. The relative ages of ego and his cousin do not affect the choice of terms; hence, a person may call a chronologically older cousin "younger brother," provided that his parent is older than his cousin's parent. Kroeber (1917) says that cousins are called older or younger siblings according to their own ages. This point was thoroughly checked with a number of informants and they all agree that terms applied to cousins depend on the relative ages of parents and parents' siblings rather than on the ages of ego and his cousins. Since Kroeber's

[114]
[128]

[text continues on p. 358, A]

[P. 356]

601
193

TABLE 1

Consanguineal and Affinal Relatives

Term No.	English	Singular with first person poss. prefix	Stem
Parent and child class			
1.	father	digóyʔ	-góʔy
2.	mother	diláʔ	-láʔ
3.	parent	diʔmálu	-ʔmálu
4.	parent	dityé·Lu	-é·Lu
5.	son	diŋá·m	-ŋá·m
6.	daughter	diŋámuʔ	-ŋámuʔ
7.	children	diŋáʔmiŋ	-ŋáʔmiŋ
Sibling class			
8.	older brother, half-brother, cousin	diʔá·tu	-ʔá·tu
9.	older sister, half-sister, cousin	diʔí·sa	-ʔí·sa
10.	younger brother, half-brother, cousin	dibéyu	-béyu
11.	younger sister, half-sister, cousin	diwítsuk	-wít sug
12.	distant male relative or friend, alternate term for cousin (m. sp.)	dikMílu or diMílu	-Mílu
13.	distant female relative or friend, alternate term for cousin (m. sp.)	diʔulišáwlam	-šáwlam
14.	distant male relative or friend, alternate term for cousin (w. sp.)	diʔulimelé·liwiʔ	. . .
15.	distant female relative or friend, alternate term for cousin (w. sp.)	disú·	-sú·
Grandparent and grandchild class			
16.	father's father	dibá·baʔ	-bá·baʔ
17.	son's child (m. sp.)	labá·ṕaʔ	-bá·baʔ
18.	mother's father	diʔélel	-ʔélel
19.	daughter's child (m. sp.)	leʔéleliʔ	-ʔélel
20.	father's mother	diʔámaʔ	-ʔámaʔ
21.	son's child (w. sp.)	laʔáʔmaʔ	-ʔámaʔ
22.	mother's mother	digúʔu	-gúʔu
23.	daughter's child (w. sp.)	legúʔyiʔ	-gúʔu
24.	father's mother's sister, mother's mother's sister	dibúši	-búši
25.	sister's child's child (w. sp.)	lebúšiyiʔ	-búši
26.	father's father's sister, mother's father's sister	disámaʔ	-sámaʔ
27.	brother's child's child (w. sp.)	lasáʔmaʔ	-sámaʔ
28.	father's father's brother	disáksak	-sáksag
29.	brother's son's child (m. sp.)	lasáksagiʔ	-sáksag
30.	mother's father's brother	diʔé·bu	-ʔé·bu
31.	brother's daughter's child (m. sp.)	leʔé·ṕuʔ	-ʔé·bu
32.	father's mother's brother, mother's mother's brother	ditóʔo	-tóʔo
33.	sister's child's child (m. sp.)	latóʔyiʔ	-tóʔo
Great-grandparent and great-grandchild class			
34.	relative of third ascending generation	diṕísew	-ṕísew
35.	relative of third descending generation	leṕísewi	-ṕísew
Uncle and nephew class			
36.	father's brother	diʔéwšiʔ	-ʔéwšiʔ
37.	brother's child (m. sp.)	dimáʔša	-máʔšaʔ
38.	mother's brother	didáʔa	-dáʔa
39.	sister's child	dimá·gu	-má·gu
40.	father's sister	diyá·ʔ	-yá·ʔ
41.	brother's child (w. sp.)	dišémuk	-šémug
42.	mother's sister	dišášaʔ	-šášaʔ

[P. 357]

601
193

TABLE 1
(continued)

Term No.	English	Singular with first person poss. prefix	Stem
Parent-in-law and child-in-law class			
43.	parent-in-law	láyuk	-áyuk
44.	son-in-law	dibuʔágaliʔ	buʔágaliʔ
45.	daughter-in-law	léyeš	-íyeš
46.	child's spouse's parents	lámik	ámig
Sibling-in-law class			
47.	wife's brother	diwlá·dut	-wAlá·dut
48.	husband's brother	dimeʔéwšiʔ	-meʔéwšiʔ
49.	sister's husband	didámaw	-dámaw
50.	brother's wife (m. sp.)	dimašášaʔ	-mašášaʔ
51.	husband's sister, brother's wife (w. sp.)	diyágil	-yágil
Spouse class			
52.	husband	dibumé·liʔ	bumé·liʔ
53.	husband	diʔmé·š	-ʔmé·š
54.	wife	dimlá·yaʔ	-mlá·yaʔ or -imlá·yaʔ

601

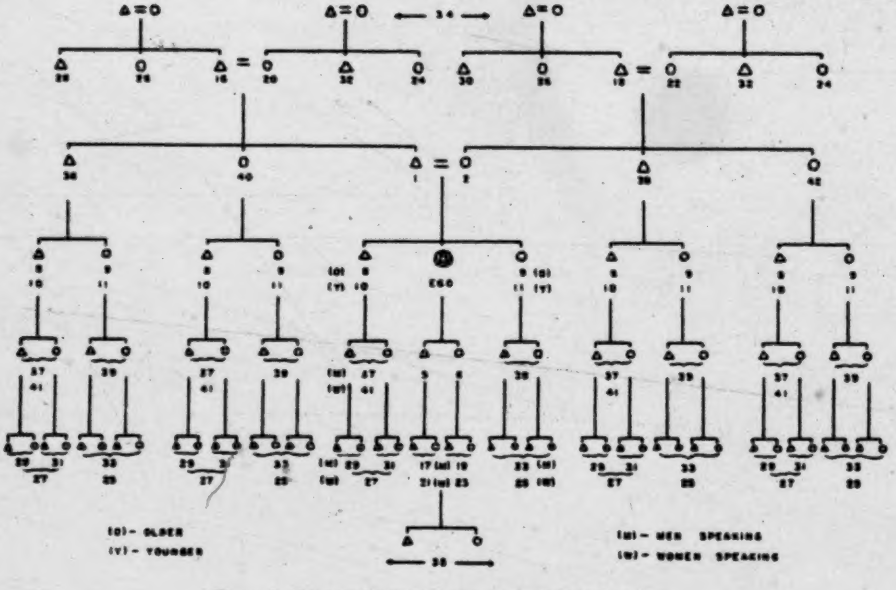


Figure 1. The standard Washo consanguineal kinship system.
Triangles denote males; circles denote females.

601 [114] 601 178

information came from a single informant, he may have been misinformed on this point. There is, however, a tendency among younger people to call cousins older or younger siblings on the basis of their own ages rather than the ages of parents and their siblings. This trend is clearly visible in the analysis of terminological usages given in table 3. It is a logical development since the introduction of schools, calendars, and written records of births. Before then, relative ages of individuals of different nuclear families would not ordinarily be known if the persons were of approximately the same age.

601 Six distinct terms exist for father, father's brother, father's sister, mother, mother's brother, and mother's sister. Brother's child is distinguished from sister's child; both are distinguished from own children. Husbands and wives of aunts and uncles are not considered relatives. All my informants were quite definite on this point. 601 114 Lowie (1939) and Siskin (MS) say that mother's sister's husband is called by the same term as father's brother, and father's brother's wife by the same term as mother's sister. This was true when two brothers married two sisters, as occasionally happened. In such cases, mother's sister's husband is the same person as father's brother; and father's brother's wife is the same person as mother's sister. Lowie's information may have been obtained from the descendant of such a marriage.

601 Terminological usages between ego and all relatives of the second and third ascending and descending generations are reciprocal. For example, ego calls his mother's father diˀélel (my mother's father), and this relative calls him leˀéleliˀ (my daughter's child). Morphophonemically, the stem of these two words is the same (-ˀélel). The term, leˀéleliˀ, may be translated approximately as "the one whose mother's father I am."

There are apparently no differences in terms of reference and address. Kroeber (1907; 1917) and Lowie (1939) have not reported any; and I have found none in the course of my interviewing. William Jacobsen, who is currently making a study of the Washo language, also corroborates this.

601 The extent of the Washo kinship system is elastic, but usually the range of recognized relatives is not extensive. Second cousins are brothers and sisters, but relationships are rarely traced that far. The children of grandparents' siblings are properly aunts and uncles (e.g., father's father's brother's daughter may be called father's sister, for father and his father's brother's daughter call each other brother and sister), but these relatives are usually not called aunts and uncles. Often my informants did not know the identity of the children of their grandparents' siblings; when they did know these persons, they sometimes called them by general terms meaning "my friend or distant relative." Occasionally, however, a person would call a child of a grandparent's sibling by the appropriate uncle or aunt term. [582] Since the Washo are forbidden to marry relatives, a minute tracing of relationships would make it difficult to find a mate. This may account for the infrequency with which distant relatives are recognized.

POLITE AFFINAL TERMS

601
576
The Washo use a set of polite, teknonymous terms for most affinal relatives. These are given in table 2. One informant gave two polite terms for sister's husband. He was called diʔí·sa bumé·liʔ (my older sister's husband) as well as dimá·gu dagóyʔ (my sister's child's father). My notes contain only one polite term for brother's wife (my brother's child's mother); I have not recorded the logically possible term "my older [or younger] brother's wife." This suggests that the use of descriptive terms with "mother" in them may be more strongly prescribed than those containing "father." On the other hand, my informants may simply have failed to mention the descriptive term "my older [or younger] brother's wife." Since I did not explicitly investigate all the possible descriptive terms which may logically be used for affinal relatives, table 2 may not give a complete list of terms. Nevertheless, the essentials of the system are presented.

601
576

TABLE 2

Polite Affinal Terms

English	Washo	Literal translation
son-in-law	leʔéleliʔ dagóyʔ (m. sp.); legíʔyiʔ dagóyʔ (w. sp.)	daughter's child's father; daughter's child's father
daughter-in-law.........	labé·ṗaʔ daláʔ (m. sp.); legíʔyiʔ daláʔ (w. sp.)	son's child's mother; son's child's mother
father-in-law	dibumé·liʔ dagóyʔ (w. sp.)	husband's father
wife's brother	diŋáʔmiŋ dadáʔa	children's mother's brother
husband's brother......	diŋá·m deʔéwšiʔ	son's father's brother
sister's husband	dimá·gu dagóyʔ diʔí·sa bumé·liʔ	sister's child's father older sister's husband
brother's wife	dimáš daláʔ (m. sp.)	brother's child's mother
brother's wife	dišémuk daláʔ (w. sp.)	brother's child's mother

7:Freed E-5 (1952-1957)1960 NT20 Washo NT20

[P.358, C]

[P 359, A]

ALTERNATE TERMS

601
124
178

Terminological change was determined by comparing modern usages with the standard kinship system. In the course of seventy genealogical interviews, at least a few variant kinship usages could probably have been collected during aboriginal times. However, the conditions of modern Washo life make variant usages in genealogical interviews almost inevitable. Some informants speak Washo poorly and may guess at terms; others do not understand English well and may misunderstand the investigator's questions. The problem is to separate the alternate usages due to mistakes and misunderstandings from the ones which may indicate that the terminological system is changing.

[P.359, B]

601
178
124

Two criteria are available for this purpose. First, usages arising from change in the terminological system should occur more frequently than other "alternate" usages which appear to represent erroneous information. Second, the alternate terms of the new, emerging kinship system should form an internally consistent system.

Analysis of the Washo genealogical data showed the following alternate usages.

1. Thirteen informants called some or all of their cousins by terms distinct from the sibling terms. The terms used are numbered 12, 13, 14, and 15 in table 1.
2. Five informants called their brother's children and sister's children by a single term.

[P.359, C]

601
124
178

TABLE 3

Incidence of Washo Kinship Usages in Ego's and Adjacent Generations

Kinship usage*	Age group of informants							
	10-19 (15)[b]	20-29 (13)	30-39 (7)	40-49 (12)	50-59 (8)	60-69 (8)	70-79 (5)	80-89 (2)
Siblings								
Standard	12	12	7	12	8	8	5	2
Term unknown	3							
Miscellaneous	3	1						
Cousins								
Standard	3	3	6	8	7	7	4	
By own age	4	4	1	1	1			
Alternate	2	3	1	2	2	2		1
Term unknown	9	6	2		1			
Miscellaneous	1			2				
Uncles								
Standard	6	11	6	10	7	8	5	2
Alternate	3							
Term unknown	7	1				1		
Miscellaneous				1				
Aunts								
Standard	8	8	6	10	7	7	4	2
Term unknown	6	1	1					
Miscellaneous		2						
Nephews and nieces								
Standard	3	8	4	11	8	8	5	2
Alternate	1	2	2					
Term unknown	3	3						
Miscellaneous	1	1			1			
Father and mother								
Standard	12	13	7	12	8	8	5	2
Term unknown	3							
Son and daughter								
Standard	1	9	5	9	7	5	4	2

*The meanings of "standard" and "by own age" are clear from the text. "Term unknown" means the informant did not know the term. "Alternate" refers to the terms of the new terminological system. "Miscellaneous" includes all alternate usages regarded as nonsignificant; these are listed in the text. If a single informant gave different kinds of usages (e.g., standard and alternate) for a single kind of relative (e.g., cousins), he was counted twice. If he gave more than one different kind of "miscellaneous" response for any one kind of relative (as for example to call one aunt "grandmother's sister" and the other aunt "great-grandparent"), he was counted only once.

[b] The number in parentheses is the number of informants in the age group.

[P 360, A]

601
178
[124]

3. Three informants called their mother's brother and father's brother by a single term.

Two alternate usages were given by two informants: mother's brother's child was called brother's child, and older brother was called younger brother. A considerable number of alternate usages were given by only one informant: father's sister was called grandmother's sister, father's sister was called great-grandparent, mother's sister was called grandmother's sister, father's brother was called older brother, brother's son was called younger brother, mother's sister's son was called sister's child, and older sister was called younger sister. One woman used the male speaking term for brother's child instead of the female term. One informant used brother's child (man speaking) for sister's son and brother's son, and sister's child for sister's daughter and brother's daughter. This is what Schmitt and Schmitt (n.d., p. 42) call a "loan translation," that is, the Washo terms have been equated with the English nephew and niece terms.

The three alternate usages which occur most frequently appear to represent change in the terminological system. They form a consistent system: the new terminology is of the lineal type in all generations. The alternate cousin terms and the terminological merging of brother's child and sister's child show a significantly higher frequency than all other alternate usages. The merging of father's brother and mother's brother occurs only slightly more than other, nonsignificant alternate usages; but it is included with the other two primarily because it conforms to the trend toward a lineal terminological system in the three generations under study.

The alternate terms appear to represent a new system of kinship terminology rather than survivals from an older system. From the breakdown of Washo kinship usages given in table 3, it can be seen that the alternate uncle and nephew-niece terms are used by individuals in the younger age groups; and this leads to the inference that they are recent. The alternate cousin terms are spread rather evenly throughout the generations, but they too appear to be part of a new terminological system. This is indicated from the terms used for children of cousins. Older people generally use the terms meaning brother's child and sister's child in spite of the fact that they no longer call their cousins siblings. Younger people tend to use the cousin terms for the children of cousins. The terms for cousins apparently are first changed in ego's generation, and the change is then extended to the first descending generation. Thus the use of the alternate cousin terms is becoming more firmly embedded in the terminology. Another reason for believing that the cousin terms are part of a new kinship system is that the older people who use them state that sibling terms are also correct whereas the younger people are unaware that sibling terms may be used. The greater frequency of the alternate cousin terms compared to the alternate nephew-niece and uncle terms and their greater age as indicated by their occurrence among older persons is in accord with Dole's observation that when terminological patterns change, the cousin terms change first (Dole, MS, p. 428). The Washo data indicate that terms of the first descending generation may be the next to change, followed by changes in the parental generation.

Most people who use the standard cousin terms declare that the alternate cousin terms are incorrect.

[1-360,B]

601
178

However, the older people who use the alternate cousin terms handle the language expertly and can speak as authoritatively on the culture as those who use the standard terminology. When asked the reason for using alternate cousin terms, these older people usually say that they just prefer them. One man said that he used the alternate cousin term because he disliked his cousin but was fond of his brother who was dead. He did not want to apply the term for a relative whom he liked to one he disliked. On the other hand, another informant said he used alternate cousin terms for male cousins because he was friendly with them (the cousin terms also mean "friend"). Another informant said she used the alternate cousin terms because these relatives were not her "real" siblings. Apparently, no rules govern the use of standard or alternate cousin terms; it appears to be a matter of personal preference.

In general, the younger people (10-19 years of age) who use alternate cousin terms do not know that sibling terms are also correct. This does not seem to cause conversational confusion. One boy told me that his cousins called him brother whereas he always called them cousin. He found the situation amusing, but apparently saw no conflict in the usages. Another boy recalled that he had heard older people call their cousins siblings, but said that he never did.

There is no noticeable tendency for a person who uses one of the alternate terms to use any of the others. Only one informant used the alternate lineal terms for both cousins and uncles. He had no nephews and nieces and so his usage for these relatives could not be determined.

RESIDENCE RULES

591
178
114

Washo residence rules have undergone no discernible changes since the end of the aboriginal period. The minor differences between the findings of Lowie (1939), Curtis (1926), and myself are probably not due to change. Instead they appear to arise from two circumstances: (1) Washo residence patterns are difficult to characterize since there is no residence rule which must be strictly followed; and (2) Lowie and Curtis used only a few informants whereas my data were gathered from a fairly large number of people. The residence patterns reported by a large number of persons might reasonably be expected to show greater variation than the normative statements of a few informants, especially in the absence of a compelling rule.

Lowie reports residence as matrilocal until the death of the wife's parents, when the couple burned the house and moved. Another of his informants describes residence as matrilocal or patrilocal with a slight preference for the former (Lowie, 1939, p. 308). Curtis reports initial matrilocality. After a few weeks, the couple returned to the husband's family, but many of the couples lived in both places alternately (Curtis, 1926, p. 97).

These foregoing statements agree reasonably well with most of the data on residence which I collected. However, the situation is more complicated than Lowie and Curtis report. The 70 genealogies and associated brief life histories contain information on 37 first marriages of persons of all ages. Fourteen were initially matrilocal. After a few years, usually following the birth of the first child, the couple shifted residence. Of the 14 initially matrilocal marriages, 7 were

[P.361, A]

591
178
114

subsequently patrilocal, 8 neolocal, and 1 matrilocal. I have counted a single marriage more than once if the couple shifted residence more than once. For example, if a couple lived for two years with the wife's parents, then for some time with the husband's family, and finally by themselves, they were counted as initially matrilocal and subsequently patrilocal and neolocal. Of the first marriages not initially matrilocal, 11 were patrilocal, 10 matrilocal (permanently and not just initially), and 9 neolocal.

The various kinds of residence arrangements are scattered randomly with respect to the age of informants. This is a critical point, for the neolocal marriages were not specifically reported by the earlier investigators. Although Lowie says that a couple moved after the death of the wife's parents, he does not specify the new location of the couple. Yet the fact that neolocal marriages occur as frequently among older people as among younger indicates that they are not a recent innovation.

591
178
(124)

Data on 11 second and subsequent marriages are contained in the genealogies and life histories. Three of these were initially matrilocal; and of these, 1 was subsequently patrilocal and 2 neolocal. Of the second marriages not initially matrilocal, 3 were patrilocal, 4 matrilocal, and 1 neolocal. As was true of first marriages, the various kinds of residence arrangements of second and subsequent marriages were distributed randomly with respect to the age of informants.

To trace the history of a number of Washo marriages, as has been done above, describing them as patrilocal or matrilocal or neolocal without regard for the length of time spent under the various rules, gives a somewhat distorted picture of Washo residence, for it emphasizes unduly the "neolocal" residences. Actually, almost all couples live near their parents or other close relatives the greater part of their lives. Occasionally, a family may live for a few years with no close relatives near by. For this reason some marriages have been classed as neolocal. In the matter of residence rules, the normative statements of Lowie's, Curtis', and my informants give a better picture of the essential nature of Washo residence than a statistical count. Residence may best be described as bilocal. There is no evidence that the rule of residence was different in prewhite times.

DESCENT AND INHERITANCE

428]
(68]
[764]

Descent was basically bilateral. Personal property was not inherited, for it had to be destroyed at death. Pine-nut picking rights descended bilaterally. A person also had picking rights on his spouse's land, but these rights were terminated at the death of the spouse. Certain offices may have descended from father to son. Barrett (1917, p. 8) says that each village had a hereditary chief. In former times, the office passed from father to the eldest son; more recently, he says, the office was filled by the selection of the most appropriate individual regardless of relationship. Barrett also states that the rabbit chief was a hereditary official, but this is disputed by Lowie. Neither shamans nor antelope charmers inherited their positions.

622

624
116
756

428
178

The aboriginal Washo system of inheritance fits well with the American bilateral system and has changed only slightly since the coming of the whites. One change is that people can now dispose of their property by a will. This is particularly important with regard to in-

[P 361, B]

surance policies. Some bitterness has been caused by beneficiaries who refuse to share insurance money with their siblings, since the latter would have inherited equally under the old system. Another change is that wives and husbands can now inherit from each other, and a third change is that parents can inherit money from their children if the latter die first. In aboriginal times, only consanguine relatives inherited, and these in descending order. 428 178 [578]

KINSHIP GROUPS

61 The Washo lacked sibs, lineages, and clans. The family was usually nuclear, often with a few, more distant relatives attached. 594 596 [595] The Washo formerly practiced polygyny and therefore possibly had some polygynous families. Whether these reached a frequency of 20 per cent, a level which Murdock uses to distinguish between societies with polygynous families (1948, p. 28) and those with monogamous families, cannot now be determined. My informants regard the old Washo family as nuclear, and it will be so classified here. The modern Washo family is nuclear but usually includes a few, more distant relatives.

616 The Washo formerly had a weak system of agamous moieties whose only apparent function was to oppose each other in games at the pine-nut dance. One moiety was called páwalal láyadi°, which means roughly "those who camp on the east side" (of the camp circle) or dípeh gumlémi, meaning "people of the white paint." Lowie gives a third name, páled·ai (Lowie's transcription). The other principal moiety was called táŋlelel láyadi°, which can be translated approximately as "those who camp on the west side" (of the camp circle). Members of this moiety painted themselves red and were also called awdeŋ gumlémi, "people of the red paint." Members of a third "moiety" were called dayalaligi·š láyadi° (also dewlaligi·š láyadi°), meaning "those who camp in the corner" (of the camp circle) or "those who camp in between" (the other two moieties). They lived between the east and west moieties in the camp circle and were divided between them for purposes of playing games. This third moiety seems to have had the sole function of supplying additional members to the teams representing the other two moieties. Despite this third group, the system was fundamentally dual (Lowie, 1939, p. 304). The moiety system does not exist today. [178]

A person belonged to the moiety of his father, which often was his mother's moiety also. Henry Rupert reports that when persons of different moieties married, they could join whichever moiety they wished. Hank Pete claims that a woman joined her husband's moiety. Lowie says that in the hand game, a man could leave his own moiety and join his opponents if they were luckier (Lowie, 1939, p. 304).

621 Two kinds of kin groups that frequently occur in bilateral societies are demes and kindreds. The deme, says Murdock (1949, pp. 62-63),

> . . . is most clearly observable in the endogamous local community which is not segmented by unilinear consanguineal groupings of kinsmen. By virtue of the rule or strong preference for local endogamy, the inhabitants are necessarily related to one another through intermarriage, although they cannot always trace their exact kinship connections. They are consequently bound to one another not only by common

[P. 362, A]

residence but also by consanguinity, as is, in fact, usually specifically recognized. Within such a group the only social structuring is commonly into families, which may be of either nuclear, polygamous, or extended type. Except for family ties, the strongest sense of identification is usually with the community as a whole, which is viewed as a consanguineal unit in relation to other communities in a manner quite comparable to the attitude toward one's own sib in a unilinear society. 621

Murdock believes that the Washo may have had demes (1949, p. 63). This would be important to know, since demes are thought to exert an influence on kinship terminology. They are associated with kinship terminology of the generation type in _ego's generation only_ (Murdock, 1949, pp. 158-161). I endeavored to discover whether the Washo had had demes and could find no evidence of their former existence. Murdock may have based his opinion on a sentence in Barrett: "The village community is the largest division and each village is entirely distinct from all others" (1917, p. 8). From the context, I interpret this to mean only that each village was politically independent. The principal feature of the deme, the fact that it is an endogamous community viewed by its members "as a consanguineal unit in relation to other communities," was apparently lacking among the Washo. Lowie's description of a Washo village would deny the existence of demes. His informant said that the neighbors who lived about thirty feet away were not kin (1939, p. 303). Demes clearly do not exist among the Washo today. 621 114 [601] [178]

The kindred is the commonest type of bilateral kinship group. In our society, it includes that group of near relatives who are expected to attend weddings, funerals, graduations, holiday dinners, and family reunions. Members of kindreds visit freely and support one another when they are in difficulty. Kindreds in other societies have comparable characteristics and functions (Murdock, 1949, pp. 56-57). 612 171

The Washo do not appear to have groups of relatives which satisfy these criteria. Curing ceremonies, the girl's puberty dance, and funerals are attended by all interested Washo; and relatives outside the nuclear family seem to have no special functions. A Washo expects help from members of his nuclear family, but more distant relatives have no particular obligations. 612 [594]

[P.362, B]

612 more distant relatives have no particular obligations. In talking with the Washo about relatives, I get no particular feeling of a group of kinfolk larger than the nuclear family. Informants will mention this relative or that one as being particularly close, but make no mention of a group of kin standing up for them against another kin group or being obligated to aid them. The modern Washo are best regarded as lacking kindreds. The earliest evidence regarding Washo social organization is Barrett's statement that "the social organization of the Washo is primarily based upon the family unit" (1917, p. 8). This is certainly true today and there is no evidence that the situation has changed since the end of the aboriginal period. [178]

MARRIAGE

595 Curtis (1926, p. 97) says that polygyny was common and by no means exceptional. Barrett (1917, p. 8) says:

> In former times polygamy was practiced, there being no restrictions placed upon a man as to whom his second or other succeeding wife should be. On the other hand, monogamy was quite as prevalent as polygamy.

Lowie reports that both sororal and nonsororal polygyny existed. Lowie's data show a preference for the sororal form. He reports an incident in which a rancher asked a Washo why he did not have two wives. The Indian replied, "My wife has not got a sister" (Lowie, 1939, p. 309). The same preference for sororal polygyny is reported by my informants. The reason given is that strange women fight. Murdock classifies polygynous societies which are not exclusively sororal as nonsororal (1949, p. 140). I have followed his system and therefore classify aboriginal Washo marriage as nonsororal polygyny. The modern Washo have abandoned polygyny because it is forbidden by law. [178]

587 Both the sororate and the levirate were formerly practiced to some degree. Lowie says that the levirate and sororate were correct but not compulsory (1939, p. 310). Curtis declares that a widow was bound to marry her husband's brother if he desired her (1926, p. 97). My informants generally agree with Lowie. The sororate and levirate are no longer followed. [178]

[P.363, A]

III. ALTERNATE TERMS AND ROLE BEHAVIOR

N4
601
177
[121]

This chapter is devoted to determining the causes of the emerging system of kinship terminology. Before we proceed to the explanation which seems to account for the Washo data most satisfactorily, three other explanations will be considered. The first is that the alternate terms are due to a process which Schmitt and Schmitt (n.d.) call loan translation, that is, the old Washo terms are adapted to the English kinship system. This explanation deserves attention because the alternate Washo terminological usages form a lineal type of kinship terminology resembling the English kinship system.

The case for loan translation is strongest in the parental generation because the two separate terms for father's brother and mother's brother have been reduced to a single term which may be equated with the English term "uncle." But the terms for aunts have not undergone a similar merging, and it is fair to ask why loan translation should be restricted to uncles.

The use of loan translation as an adequate explanation encounters further difficulties with regard to the alternate cousin and nephew-niece terms. The process of loan translation should result in a single Washo term being used for cousins; instead, the Washo use four distinct terms. Furthermore, one of the informants who uses alternate cousin terms speaks no English and another speaks only a few words. These informants could not be directly affected by the English terminological system. In the first descending generation, the process of loan translation should alter the Washo terminology so that a single term is applied to nephews and another to nieces. But this has not happened; in the emerging terminology, all siblings' children are lumped under a single term, thereby ignoring the sex distinction between nephews and nieces. It seems clear that loan translations do not in themselves adequately account for alternate Washo terminological usages.

This is not to say that the Washos' knowledge of the American kinship system has no effect on Washo kinship terminology. It may be one of several causes of the alternate terms. But the new Washo terminology is not due solely to loan translation, for the new terms do not agree closely enough with the English system. I found only one clear case of loan translation: one informant called his nephews by one term and his nieces by another. This usage agrees exactly with the English system of terminology, a circumstance one might reasonably demand before using loan translation as an explanation of terminological change.

601
178

A second possible explanation is that the alternate terms arise from unusual circumstances whereby a relative assumes a role ordinarily played by another relative and is therefore called by the kinship term appropriate for the assumed role instead of by the term ascribed by his genealogical position. I found only one case of this kind among the Washo: a woman called a cousin by the term "older sister" instead of the genealogically correct term "younger sister" because they were raised in the same house and her cousin was actually ten years older than she. The age

[P.363, B]

III. ALTERNATE TERMS AND ROLE BEHAVIOR

601 178 discrepancy of ten years, together with being raised in the same nuclear family, made the term "younger sister" seem inappropriate. The woman knew that younger sister was the correct term, but preferred to use older sister. This kind of modification of terminological usages appears to be quite rare among the Washo. When children were reared by an aunt or grandmother, they always called these relatives by the correct terms instead of mother; and stepfathers were never called father. The Washo seem quite orthodox in the use of their kinship terminology.

A third possible explanation of the new Washo kinship system is Murdock's theory of the evolution of social organization. Murdock says that social organization is a semi-independent system which changes according to internal dynamics of its own. Of the major elements of social organization, which include the system of kinship terminology, kinds of kinship groups, rules of residence and descent, and forms of marriage, the one least susceptible to influences from outside the social organization is the terminological system. Rules of descent and kinds of kin groups are also relatively immune to the influence of external factors. Types of marriage can change directly owing to external influences, but "the impact of a change in marriage upon other parts of the social structure is usually relatively slight" (Murdock, 1949, p. 201). The aspect of social organization particularly sensitive to outside influences is the rule of residence. Rules of descent and kinds of kinship groups usually change after the residence [591] rule. In brief, change in social organization begins with modification of the residence rule and ends with the adaptive changes in the system of kinship terminology.

601 178 594 591 The features of aboriginal Washo social structure which are reflected in the standard terminology are bilocal residence, nonsororal polygyny, and bilateral descent, with the nuclear family constituting the largest kinship group. Their presumed effects upon kinship terminology as given by Murdock (1949) are as follows. Bilocal residence tends to be associated with kinship terminology of the generation type. Washo standard terminology is of the generation type in ego's generation only. Nonsororal polygyny tends to be associated with kinship terminology of the bifurcate collateral type. Washo standard terminology is bifurcate collateral in the first ascending and first descending generations. When the nuclear family stands "in majestic isolation, as it does in our own society" (Murdock, 1949, p. 156), it tends to be associated with kinship terminology of the lineal type. The Washo family is nuclear, but it does not stand in majestic isolation. Murdock does not deal explicitly with this kind of a [596] situation. However, he notes that extended families depend on the prevailing rule of residence and exert an influence on kinship terminology in accord with it (1949, p. 153). The Washo family and residence rules result in an alignment of kinsmen rather similar to that which occurs in groups with bilocal extended families; therefore, the family and residence rules taken together may be said to exert an influence in the direction of a generation type of kinship terminology. In

[P.364, A]

In summary, the strndard Washo kinship terminology may 601 be thought of as a compromise between a generation 178 type and bifurcate collateral type, as might be expected from the divergent influences arising from the social structure.

The new Washo terminological system is lineal in ego's generation and the first descending generation. In the parental generation, the uncle terms are lineal but the terms for aunts remain bifurcate collateral. Can the changes in social structure, namely, the demise of the moiety system, the loss of the sororate and levirate, and the shift from nonsororal polygyny to monogamy adequately account for the terminological changes?

The first two changes in social structure appear to have no connection with the terminological changes. Exogamous moieties tend to be correlated with the bifurcate merging type of terminology; [616] but nonexogamous moities do not have this effect, for they produce no regular alignments of kinsmen. Murdock classes societies with nonexogamous, unilineal kinship groups as bilateral (1949, pp. 161-162). [616] The Washo moiety system was agamous and therefore exerted no noticeable influence on the terminological system. Thus its loss is probably not significant with regard to the changes that have taken place in the kinship terminology. [587] If the sororate and levirate have an influence on kinship terminology, it is presumably toward the bifurcate merging type (Sapir, 1916). Since Washo standard terminology is not bifurcate merging, the sororate and levirate were never reflected in the terminology, and their lapsing has no apparent connection with the changes in the system of kinship terminology.

The loss of nonsororal polygyny has been the only significant change with regard to the changes in the kinship terminology. Nonsororal polygyny is associated with kinship terminology of the bifurcate collateral type. Its loss therefore should result in some modification in the first ascending and first descending generations. In part, this has happened; bifurcate collateral terminology is disappearing for the uncle terms and in the first descending generation. However, the aunt terms have not yet merged. The emerging terminological system in ego's generation cannot be explained by the change in marriage arrangements, for the standard terms in ego's generation are not bifurcate collateral and therefore never reflected nonsororal polygyny. At best, the disappearance of nonsororal polygyny appears to be a factor in roughly one-half of the changes in the Washo terminological system. It helps explain the new terms for uncles and for nephews and nieces. It does not explain why the terms in ego's generation are changing or why the terms for mother's sister and father's sister remain distinct.

Although changes in marriage patterns probably help 601 to undermine the bifurcate collateral terms, they do 114 not explain why the lineal type of terminology is being 178 adopted instead of the generation type. The only elements of social structure which Murdock gives as tending to be associated with the lineal type of kinship terminology [585] are neolocal residence and the isolated nuclear family (Murdock, 1949, pp. 152, 157). The Washo lack these. Modern Washo social structure is more in accord with a generation type of terminology, for Washo residence is bilocal. Therefore, while changes in Washo social structure may set the stage for some of the terminological changes, they do not account for the specific form taken by the terminological modifications. In short, Murdock's theory does not provide a fully ade-

[P.364, B]

quate explanation of the changes in the Washo kinship system although it is considerably more helpful than the other two theories discussed above.

601
114
178

SUGGESTED EXPLANATION FOR TERMINOLOGICAL CHANGES

The hypothesis here proposed to explain the alternate Washo kinship terms is that changes occurring outside of social organization can affect the terminological system without first modifying the residence rule or other elements of social structure. This hypothesis is based on the assumption that kinship terminology is closely correlated with patterned norms of behavior, or "roles." This assumption is most reasonable, for, as Murdock notes, it accords "with the overwhelming testimony of the data surveyed for the present study, and with the experience and the declared or admitted views of nearly all competent anthropological authorities" (1949, p. 112). If this assumption is provisionally accepted, the proposed hypothesis may be restated: role behavior and its associated system of kinship terminology may be directly affected by cultural changes without any changes necessarily taking place in the formal social structure. Or we may use the terminology proposed by Raymond Firth and say that within any given type of "social structure" many different forms of "social organization" may exist (Firth, 1951, pp. 39-40; 1954).

The principal difference between this hypothesis and Murdock's theory is in the elaboration of the role concept. Murdock does not explicitly deal with roles although he implies the concept when he speaks of similarities and differences between kin-types. Murdock distinguishes five kinds of similarities and differences (1949, pp. 136-137):

601
114
178
554

Coincidence: a similarity between two kin-types owing to the probability that the members of both are the same persons, as can happen as a result of certain social equalizers. Sororal polygyny, for example, tends to equate WiSi with Wi.

Proximity: a similarity or dissimilarity in spatial relations. For example, matrilocal residence, by bringing Mo and MoSi together as close neighbors or even actual housemates, operates as a social equalizer to make more likely their designation by a single classificatory term, and by separating FaSi spatially from both of them operates as a social differential to favor the application of a special kinship term to her.

Participation: a similarity or dissimilarity in group membership. Thus patrilineal descent places BrDa and Da in the same lineage, sib, or moiety and SiDa in a separate group, thereby promoting extension of the term for Da to BrDa and differentiation of the term for SiDa.

Analogy: a similarity relative to a parallel relationship. Extension of the term "mother" to MoSi, for example, acts as a social equalizer in the case of MoSiDa, increasing her likelihood of being called "sister" even under patrilineal descent when Si and MoSiDa are usually neither sibmates nor neighbors.

Immateriality: a negative similarity resulting from the functional unimportance of the relatives of two kin-types, whereby a sufficient basis for

> differentiating them is lacking. Immateriality appears chiefly with respect to distant relatives. In the English kinship system, for example, it operates as an equalizer to favor the extension of the term "cousin" to various distant relatives of little importance, without reference to distinctions of sex, generation, or collaterality. 601 114 178 554

Murdock's similarities and differences are aspects of role behavior, but they are aspects which are strongly determined by elements of formal social structure. This being so, he can trace the effects of social structure upon systems of kinship terminology without dealing with role behavior, for it is so closely tied to the formal social structure as to lack the characteristics of an independent variable. This thesis suggests that roles are characterized by many more qualities than those listed by Murdock and that some of them vary considerably within the limits set by a given type of social structure. Cultural changes can therefore cause terminological change by altering role behavior without affecting the formal social structure.

The role concept has been used in various ways by other authors. Radcliffe-Brown (1935) once argued that apparent discrepancies between social structures and terminological systems in some Californian tribes were due to the fact that systems of terminology correlate with "social usage" rather than gross social structure. Radcliffe-Brown's social usage seems roughly equivalent to role behavior. Role behavior has been used explicitly in two recent kinship studies: Schneider and Roberts (1956) propose the concept of role to account for alternate usages in the Zuni kinship systems; and Schneider and Homans (1955) suggest that alternate terms in the American kinship system, such as "father," "dad," and "pop," reflect differences in role behavior. The central hypothesis of this monograph derives directly from these two papers.

From the hypothesis that roles and terms are closely correlated and are capable of being influenced by cultural factors we may draw the following inferences regarding Washo role behavior and the emerging Washo kinship system. Since cousins are being terminologically distinguished from siblings, the roles for cousins and siblings should be significantly different. The role of mother's brother should not be significantly different from the role of father's brother, and the role of brother's child should not differ significantly from the role of sister's child, for in both cases, kin-types which are distinguished in the standard terminology are merged in the alternate terminological system. The roles associated with the rest of the standard kinship terms should all differ significantly from one another because they have remained terminologically distinct. 601 178 554

It is apparent that an explanation based on detailed comparisons of roles cannot use subjective assessments of similarities and differences between roles. A technique for describing roles is required which yields data that can be treated statistically. Such a technique, called the role profile test, was developed for this research. It is thought to give a more exact and sensitive picture of Washo role behavior than that which may be obtained solely through observations and interviews, and the statistical analysis of the test protocols gives an objective measure of similarities and differences in role behavior.

The inferences presented above will be tested with data derived from use of the role profile test. It will

[P.365, B]

601
178
554

be seen that the data strongly support the foregoing inferences, thereby supporting the validity of the assumption of a close fit between role and term. The close correlation of role and term together with the fact that the Washo kinship system is changing in spite of a relatively stable social structure supports the hypothesis that roles may vary considerably within the limits set by a given configuration of social structure, the variation being due to causes which lie outside of the social organization.

THE ROLE PROFILE TEST

125
602

The role profile test makes use of sixteen categories for describing interpersonal behavior developed by Freedman, Leary, Ossorio, and Coffey (1951). I have slightly modified the categories and converted them into a questionnaire, which appears below. As conceived by Freedman and his associates, the sixteen categories were arranged in a circle. This emphasizes an important feature of the conceptual scheme. It has four nodal points: dominance, affiliation, submission, and hostility. These nodal points occur in the questionnaire at Question 1 (dominance), Question 5 (affiliation), Question 9 (submission), and Question 13 (hostility). The questions between the nodes combine the nodal qualities in varying degrees. For example, "to teach" (Question 2) is a combination of dominance and affiliation; "to punish" (Question 14) is a combination of hostility and dominance.

Questionnaire of the Role Profile Test

1. Which relative most often tries to tell you what to do? Which most often gives you orders (or bosses you)?
2. Which relative most often teaches you how to do something? Which one gives you advice or tells you his opinions?
3. Which relative is most likely to help you if you need it?
4. Which relative is most likely to feel bad and sympathize with you when something goes wrong?
5. Which relative is specially fond of you?
6. Which relative most often coöperates (works together) with you?
7. Which relative depends on you most and most often asks your help?
8. Which relative respects you the most? Which one asks your opinions?
9. Which relative obeys (minds) you if you tell him or her to do something?
10. Which relative is most eager for your approval?
11. Which relative would be the most likely to say or think you did something wrong (or bad)?
12. Which relative nags you most?
13. Which relative disapproves of you and criticizes you most often?
14. Which relative punishes you or gets angry (or mad) if you don't mind or if you do something wrong (or bad)?
15. Which relative is most likely to refuse you help even if you need it pretty badly?
16. Which relative would be most likely not to want to have anything at all to do with you?

The role profile test is administered as follows.

125
602
1

The informant is provided with slips of paper containing Washo kinship terms written quasiphonetically for all the relatives he possesses in first ascending, ego's, and first descending generations. These, of course, differ from person to person. The informant is then asked to arrange the slips of paper in a column in response to each of the sixteen questions. The relative ranking highest in the behavior questioned is to be placed at the top of the column; the remainder are to be ranked in descending order, with the one ranking lowest in the behavior in question to be placed at the bottom. The first few questions are for practice and designed to acquaint the informant with the kind of response desired. The investigator asks "which of your relatives weighs most . . . is tallest . . . is oldest" or some other similar question, and instructs the informant to arrange the slips of paper, helping him if necessary. Once the "set" of the experiment is established, the questionnaire is administered. The questions are explained to the informant, using examples if necessary; they are not read mechanically. The informant's responses are noted for each question, and the paper slips are shuffled before the next question is given. The result is a test protocol ranking a person's relatives in each of the sixteen categories of interpersonal behavior.

Several precautions must be observed if the test results are to attain their maximum reliability. First, the investigator must determine the opportunity the informant has had for knowing and interacting with the relatives to be included in the test. If there has been a reasonable opportunity for interacting with a relative, he is to be included in the test even if the informant has had little interaction with him. If there has been no opportunity for interaction, the relative should be excluded. For example, if a relative has lived close to the informant for many years, he is to be included even though the informant rarely sees him. In this case, the opportunity for interaction exists, and the fact that none has taken place may be an important feature of the role behavior. However, if a relative died when the informant was a baby, or lives at a great distance, or is feeble-minded, he is to be excluded, for the informant has had no opportunity to interact with him.

124
125

Second, the same interpreter should be used for all informants. This should not be taken too literally, for feuds and hard feelings can make the presence of particular interpreters unpleasant to informants. In addition, if the interpreter is related to the informant, this might tend to influence the informant's responses. It is probably best to use an interpreter who is not related to the informant. This precaution could not be observed for two Washo informants owing to the prevailing rules of courtesy. These two informants were slightly deaf and it was necessary to shout at them. Among the Washo, it is considered impolite for a person to shout at a nonrelative. Therefore, relatives had to be used as interpreters.

[576]
125

Third, the testing situation should be standardized. This means that as few relatives as possible should be looking over the informant's shoulder while he is taking the test. An easy way to shed distracting relatives is to conduct the interview in an automobile.

Fourth, the questions should be asked randomly. I suspect that there is some contagion from one question to the next. This is enhanced if, for example, all the questions probing dominance are asked one after the other. By randomizing the questions, the investigator

can break up a developing pattern in an informant's 125
responses. This precaution was not followed in the present study because its importance was not realized until the field work was almost completed.

Finally, the sample tested should be random. This 125
is probably the most difficult of all the precautions to 123
observe, for many persons will refuse to work with the investigator. Approximately twenty Washo refused with varying degrees of firmness to work with me. Of these, probably half would have eventually weakened because I could have brought pressure to bear through some of their relatives. This still would leave a sizable number of adamant refusals. In small, homogeneous groups like the Washo, the lack of a random sample is probably less serious than in larger, more heterogeneous societies.

In the present study, the above-mentioned precau- 125
tions were carried out less fully than they might have been because the importance of some of them became clear only as the work progressed. The first four may be observed with no particular difficulty. I regard numbers one and four as particularly important. The problem of obtaining a random sample presents the most difficulty, but the effort must be made so that statistically valid inferences may be drawn about the larger population.

The role profile test deals only with the qualitative 125
characteristics of roles. It indicates that a role ranks 554
high in teaching or helping or fondness and low in submission or hostility. But roles also differ in their content. For example, both mother and father help a person, but the nature of the help differs. The mother cooks for an individual and mends his clothes; the father helps him to fix his car or to build a house. The role profile test tells us only that something is taught, but it does not tell us what is taught. The content of the teaching or helping or punishing distinguishes roles as much as the qualities of the roles. Among the Washo, the differences in the content of roles generally follow sexual lines. For the most part, this study does not deal with these differences in content; but it will be seen that content must be taken into account in distinguishing between the roles of the members of the nuclear family who are of opposite sex and in the same generation.

THE SAMPLE TESTED

125
The role profile test was administered to 47 of approximately 280 Washo living in the vicinity of Gardnerville, Nevada, and Woodfords, California. An effort was made to select a sample with an equal number of men and women, and one in which the young, middle-aged, and old were represented fairly equally. However, the persons within these categories were not selected randomly. The sample contains 20 men: five are thirty-five years of age or younger; 9 are from thirty-six to fifty-four years of age; and 6 are fifty-five years of age or older. The sample contains 27 women: 10 are thirty-five years of age or younger; 11 are thirty-six to fifty-four years of age; and 6 are fifty-five years of age or older. No one was tested who was under fourteen or who had less than seven different kinds of relatives. This reduced the number
of young people who could be tested. The reluctance [124]
of the older Washo to mention dead relatives meant that many of the older people would not give all their relatives in the genealogical interviews, or would re-

[P. 367, A]

125
[124]
[602]

fuse to be interviewed at all. This reduced somewhat the number of old people in the sample. Two people could not finish the test: one old woman, after completing four questions, burst into tears at the mention of a dead relative; and a young woman could not finish the last six questions, for she rejected the idea that any of her relatives could be hostile. The questions these women finished are perfectly usable and have been included in the analysis.

The sample includes 4 blind people, 4 others with whom I had to use interpreters, and 8 people who were illiterate. None of these 16 persons could manipulate the slips of paper by themselves. They could take the test, for they retained a mental list of the relatives involved and verbally directed the investigator as to the arrangement of the slips. The order of relatives was read back to them and they continued to make adjustments until they were satisfied. They handled the test fairly well, but not so well as people who could arrange the slips of paper themselves. This fact probably increases the variability of the protocols.

STATISTICAL ANALYSIS

128
554

The purpose of this analysis is to reduce the data to a form in which the patterns of role behavior become apparent, and their similarities and differences can easily be compared. Since the sample was not chosen at random from the population, inferences drawn from it about the larger population are, statistically speaking, dangerous.

Two factors make the handling of the data troublesome: (1) the number of relatives contained in the particular protocols is different, ranging from seven to fourteen; and (2) protocols with the same number of relatives often contain different kinds of relatives. The ordinary, nonparametric methods of treating ranked data assume that each individual ranks the same set of objects. Another possible method of analysis involves the construction of preference matrices for all relatives in all sixteen behavioral categories. This idea was discarded because the size of the matrices, together with the variability and the smallness of the numbers in the cells, did not seem to promise sufficient returns for the work involved.

Consequently, the question of quantifying the data was studied. Because of the unequal number of relatives in the various protocols and because the relatives were often different in kind, some sort of metric seemed unavoidable. Consider a specific category of behavior and assume that the characteristic which determines a person's rank can be measured numerically and is distributed normally in the population. Let X equal the numerical value of the characteristic. Then X is a normally distributed random variable which, for convenience and with no loss of generality, we can assume has mean zero and variance one, that is, approximately 68 per cent of the population have values of X between -1 and +1. Thus, there are a few individuals who have the characteristic to a marked positive degree leading to an almost certain rank of one in any comparison, and a few individuals who have the characteristic to a marked negative degree leading to an almost certain lowest rank.

Now suppose that you have a judge and you take a random sample of n individuals from the population and ask him to rank them. Further, suppose that you repeat this indefinitely with samples of n. Now consider the average value of X for all individuals who receive the rank r. For any given value of X, say x, the probability that you will get a sample of n in which exactly (r - 1) will have values of X > x and (n - r) will have values of X < x while one will have a value in the interval (x, x + dx) is

$$\frac{n!}{(r-1)!\ (n-r)!} q_1^{\ n-r} q_2^{\ r-1} q_3$$

where q_1, q_2, and q_3 are the probabilities respectively for falling short of x, exceeding x, and falling in the interval (x, x + dx).

More precisely, to within terms of order dx,

$$q_1 = \int_{\infty}^{x} \frac{1}{\sqrt{2\pi}} e^{\frac{-t^2}{2}}\, dt,$$

$$q_2 = \int_{x}^{\infty} \frac{1}{\sqrt{2\pi}} e^{\frac{-t^2}{2}}\, dt,$$

$$q_3 = \frac{1}{\sqrt{2\pi}} e^{\frac{-x^2}{2}}\, dx.$$

The formula for the expected or mean value, μ_r, of the rth rank can then be written as follows

$$\mu_r = \int_{-\infty}^{\infty} \frac{n!}{(r-1)!\ (n-r)!} x \cdot q_1^{\ n-r} q_2^{\ r-1} \cdot \frac{1}{\sqrt{2\pi}} e^{\frac{-x^2}{2}}\, dx.$$

A table for the values of μ_r is given in Fisher and Yates (1953, pp. 76-77).

Admittedly in our data, the samples of n were not selected at random since they consist of all the relatives of the ranker in three selected generations. However, the Washo are a small, homogeneous, interrelated group; therefore, the relatives of one person are probably quite similar to the relatives of any other person. Taking this into consideration, it was thought that the relatives ranked by a given individual would have sufficient spread over the range of a characteristic to make the use of the metric μ_r meaningful. At the very least, the use of normal scores is a device which enables one to put rankings of, say, fourteen items and rankings of, say, seven items on numerical scales which are comparable.

If the kinship terms have no effect on the ranking within the categories, then the assignment of the kinship terms to the particular individuals being ranked would be at random. Thus, the rank of "father" would depend on the specific characteristics of the individual being ranked and not on the fact that he is called father. Consequently, it would seem that since individuals vary, the rankings of "father" would also vary from protocol to protocol. If, however, it were found that the rank of "father" is relatively constant, then it would seem that the kinship term "father" has a weight in determining rankings.

After normal scores had been assigned to the test rankings, the mean, standard error of the mean, and 95 per cent confidence limits were calculated for each

[P.368, A]

128
554

relative in all sixteen categories. The mean was calculated as follows:

$$\bar{X} = \frac{\sum_{i=1}^{N} X_i}{N} .$$

The standard error of the mean was calculated by the formula

$$S_{\bar{X}}^2 = \frac{\sum_{i=1}^{N} (X_i - \bar{X})^2}{N - 1} .$$

The 95 per cent confidence limits were estimated by the formula

$$\bar{X} \pm 2S_{\bar{X}}$$

(When x is distributed normally, the confidence coefficient corresponding to the interval $\bar{X} \pm 2S_{\bar{X}}$ is .954).

An inspection of the lengths of the confidence intervals revealed no striking differences among them. Comparisons of the end points of the confidence intervals showed the differences among the means of many relatives in each category of behavior to be significant because of the lack of overlap between the confidence intervals.

The male and female protocols were analyzed separately because it was assumed that roles are enacted somewhat differently toward men and women. That this assumption is correct is shown by the table on p. 395 (bottom). If the male and female protocols had been lumped, some of the differences in role behavior could have been obscured whenever the sex differences happenned to cancel each other. The fact that the male and female test protocols give slightly different results does not mean that we are dealing with two separate societies or that Washo society is stratified or segmented in any way. Since the Washo are one society and have essentially one kinship system, a significant distinction between two roles occurring among either men or women is regarded as a distinction obtaining for the whole society. Therefore, the following definition of role difference is used in this study: if the confidence intervals about the means of two roles fail to overlap in any category of behavior for either men or women, the roles are considered to differ significantly.

The results of the statistical analysis are given in Appendices I and II. Appendix III contains the graphs of the means of all the roles investigated. These graphs of means are called role profiles. Appendix IV presents the graphs of the sixteen categories with the kinship roles on the x axis.

ROLE BEHAVIOR

554
602
171

One general observation may be made before examining Washo kinship role by role. This concerns the distinctiveness of almost all the roles. The Washo are among the bilateral tribes of the Great Basin, Plateau, and California which are generally thought to contain little significant kinship patterning apart from family relationships. Murdock has investigated this

[P.368, B]

problem among the Tenino of central Oregon. He found a good deal of kinship patterning and concludes that there is considerable patterning of kinship behavior even in the simpler, sibless tribes (Murdock, 1949, pp. 111-112). The present study presents additional evidence in support of Murdock. The table on p. 395 (top) is a compilation of role comparisons indicating where the differences in the means are significant. This table shows Washo kinship behavior to be far from amorphous.

554
602
[171]

The role data are summarized below. The letters in parentheses after the kin terms are the abbreviations used in the appendices. The order in which the roles are given here is the same order observed in all the appendices.

554
602
128
593

Father (F). This relative ranks high in dominance (Categories 1-4), fairly high in affiliation (Categories 5-6), rather neutral in submission (Categories 7-10), and generally low in hostility. There is some ambivalence in the role of father regarding hostility because he is a disciplinarian for both men and women as shown by his high score in Category 14. In addition, women see him as a mildly suspicious and disapproving figure (Category 11). The only category where the role of father differs for men and women is Category 2 (to teach).

Father's brother (FB). This role differs considerably for men and women. He is a much more important relative for men than for women as indicated by his higher rating in all categories except the last two, which show rejection. The role differs significantly for men and women in Categories 2 (to teach) and 9 (to obey), and the difference comes very close to being significant in Category 1 (to order). The general role profile of father's brother for women is that of an unimportant relative with whom there is little interaction. The general role profile for men is roughly the same as that of father, the significant differences occurring in the first two categories.

Father's sister (FZ). The role profile for father's sister is similar for both men and women. She is a rather cold and hostile figure; she ranks high only in hostility (Categories 11-13) and rejection (Categories 15 and 16). Although she is a disapproving relative, she possesses no disciplinary power over ego as shown by her negative score in Category 14. The role profile of father's sister is similar to that of mother's sister but ranks lower in most qualities except hostility and rejection. This is true for both men and women.

Mother (M). The role profile for mother is similar to that for father. She ranks high in dominance and affiliation, lower in submission, and low in hostility. Like father, she is a disciplinarian, as indicated by her fairly high score in Category 14. Category 11 (to suspect wrongdoing) shows a significant distinction between the male and female profiles, the women seeing their mothers as more suspicious. A similar distinction occurs for the father role, although the difference in role behavior is not significant. The mother is the most important and distinctive relative for a Washo. The table on p. 395 (top) gives 190 significant distinctions between mother and all other roles. This number is far more than the next closest relative, father, with 133.

Mother's brother (MB). This relative is neutral in dominance and affiliation, and low in submission, for both men and women. Mother's brother is a

[P 369, A]

554
602
128
593

more suspicious and hostile figure for women than for men (Categories 11, 12, 13, and 14). For the most part, mother's brother is a rather neutral figure showing few large positive or negative scores.

Mother's sister (MS). This relative is a much more dominating figure for women than for men. The difference is significant in Category 2 (to teach). Mother's sister is neutral in affection for both males and females, ranks higher in submission for males, and fairly high in hostility towards both. Her rather high score in Category 13 for both men and women shows her to be a disapproving and critical relative.

Older brother (OB). The most distinctive feature of this role is its neutrality. Its scores in all categories are close to zero. This probably is due to older brother's ambiguous age position. He is older than ego but not a member of ego's parents' generation. Consequently, his role has attributes both of equality and of superiority. The result is a role lacking distinctive features.

Younger brother (YB). This is another role lacking distinctive features. The probable explanation is similar to that used for older brother: younger brother is ambivalent regarding age position, for he is younger than ego and yet a member of the same generation. The significant differences between older and younger brother occur in the first two categories. Older brother is a much more dominating figure than younger brother.

Older sister (OS). This role is quite different for men and women. For women, she is a mildly dominant and highly coöperative relative. For men, she is neutral in dominance, affiliation, and submission, but ranks high as a disapproving, critical, and suspicious relative. Significant differences in the roles occur in Categories 2 (to teach) and 6 (to cooperate).

Younger sister (YS). The role of younger sister is quite similar to that of younger brother. It lacks distinctive features, seeming to fall between the roles of daughter and older sister. This is probably due to younger sister's position as a member of ego's generation who is younger than ego.

Male cousin (MaC) and Female cousin (FeC). These role profiles are based on a small number of protocols, since not many people use the cousin terms. Consequently, the profiles should be viewed with much less confidence than those of other relatives. The profiles indicate that cousins are unimportant relatives with whom there is little interaction. An apparent exception is the behavior of female cousins towards females in Category 13 (to disapprove).

Son (So). This relative ranks low in dominance and hostility and high in affection and submission. The profiles for men and women are similar.

Daughter (D). The role profiles for daughter closely resemble those of son; but there is more difference in the male and female profiles than there is for son. The difference is significant in Category 2 (to teach). Large differences also occur in Categories 6 (to coöperate), 7 (to depend), and 8 (to respect) with the profile for women scoring considerably higher.

Brother's child (BCh). This is a relative with whom there is little interaction. He ranks very low in dominance, low in affiliation, low to neutral in submission, and low in hostility. The profiles

[P.369, B]

554
602
128
593

for men and women are quite similar.

Sister's child (SCh). The role profiles of this relative are almost identical with those of brother's child. Sister's child ranks very low in dominance, low in affiliation, and low to neutral in submission and hostility. The role profiles for men and women are very similar.

A different perspective on Washo role behavior can be obtained from the graphs of the categories.[1] They facilitate comparison of the sixteen roles within the behavioral categories.

Category 1 (to order). The most important relatives in this category are those who are older than ego. Father and mother attain the highest score for both males and females. Father's brother and father's sister for females and mother's brother for males are exceptions to the general rule that older relatives rank high in dominance.

Category 2 (to teach). As might be expected, relatives who are older than ego are ranked high. Older relatives who do not rank high are father's brother and father's sister for females and older sister for males.

Category 3 (to help). Mother and father attain high scores for both men and women. Father's brother and older brother are fairly high for men; older brother, mother's sister, and older sister attain positive scores for women.

Category 4 (to sympathize). Mother and father are the most sympathetic relatives. In addition, a man expects sympathy from his mother's sister and older brother, and a woman from her older brother, older sister, and younger brother.

Category 5 (to like). For women, the important relatives are mother and father. Older brother, older sister, son, and daughter also attain positive scores. All are members of the nuclear family. For males, affection is more widely diffused outside the nuclear family. However, men do not feel themselves as intensely liked as women: note the higher scores of father and mother for females.

Category 6 (to coöperate). There is considerable difference between men and women. The relatives who coöperate with men are men and those who coöperate with women are women. Note also the higher scores of the relatives who coöperate with women as opposed to those who coöperate with men.

Category 7 (to depend). This category of behavior is surprisingly undifferentiated for men. Mother is the only really dependent person. Even son and daughter rank low in dependence. Women see their children as highly dependent upon them.

Category 8 (to respect). One's children are the most respectful relatives. Mother also ranks high in this category. Women feel somewhat more respected than men, as indicated by the scores for daughter and mother.

Category 9 (to obey). The most obedient relatives are son, daughter, and the younger siblings, all of whom are younger than ego. A person has little authority over younger people if they are not members of his nuclear family, as indicated by the scores for brother's child and sister's child.

Category 10 (to want approval). For women, the only positive scores are achieved by members of the nuclear family. Men show a slight positive score for father's brother and mother's sister. As

[1] [see cat. 116, pp. 372-375 --Ed.]

[P. 390, A]

in Category 5 (to like), women confine their significant interactions to the family while men have more diffuse and less strongly structured relationships. This is made quite clear by the table of significant distinctions on p. 381 (right). Only two significant distinctions occur among the male role profiles; among the female role profiles, 21 significant distinctions occur. 554 128 602 593

Category 11 (to suspect wrongdoing). For men, the suspicious relatives are father's brother, father's sister, mother's sister, and older sister. Women have a greater number of suspicious relatives: father, father's sister, mother, mother's brother, and older siblings.

Category 12 (to nag). This is a relatively undifferentiated category. For men, older sister scores higher than all other relatives. Women seem to have no outstanding relatives in this category.

Category 13 (to disapprove). The nodal category for hostility shows a remarkable similarity between male and female role profiles. The only hostile relatives, and they are only mildly hostile, are father's sister, mother's sister, and older sister. Female cousin may be ignored because the cousin profiles are based on but a few protocols. Category 13 for men is similar to Category 11 for men. I can offer no explanation for the concentration of hostility in older female relatives. [578]

Category 14 (to punish). Older relatives are most prominent in this category. Father's sister is an exception for both men and women and father's brother for women. This category, together with Categories 1 and 2, shows that father's siblings lack dominance over women.

Category 15 (to refuse help). This category emphasizes the nuclear family relationships of father, mother, son, and daughter. They are the relatives with the lowest scores. [594]

Category 16 (to reject). This category illustrates even more clearly than Category 15 the closeness of a person to his father, mother, son, and daughter.

Some interesting inferences can be drawn from this review of categories. First, the importance of the nuclear family is clearly emphasized, especially the father, mother, son, and daughter relationships. Second, neither patrilineal relatives nor matrilineal relatives receive greater emphasis; the two groups of relatives have equal importance. Third, there is an interesting difference between men and women. If Appendix D[1] is examined, it will be seen that men have many more significant distinctions among roles in the categories probing dominance (1-4 and 13-16) than in the categories testing submission. Women have a closer to equal number of significant distinctions among roles in the categories probing dominance as in the categories testing for submission. In other words, men tend to see their relationships regarding who dominates them as clearly structured, but are much less clear as to whom they dominate; women see their relationship with subordinate relatives to be structured almost as clearly as their relationships with dominant ones. This may be an indication that Washo males tend to lack self-confidence and that Washo women may have made a more satisfactory adjustment to modern conditions than have the men. 554 128 554 128 154

This inference receives support from my observations. Men seemed less inclined to put themselves in

[1] [See cat. 116, p. 387, A -- An.]

a situation where their egos could be threatened. For example, they were more reluctant to be interviewed and to take the role profile test. 554 128 154

The apparent differences in the adjustment of Washo men and women resemble the different adjustments to modern conditions made by men and women among the Saulteaux and Ojibwa. Hallowell made a study of acculturation and personality changes among the Saulteaux and concluded that women are better adjusted than men [171] because the male aspects of culture have changed more through acculturation (1942, p. 48). Caudill studied the psychological characteristics of acculturated Ojibwa and also concluded that women seem to make a more satisfactory adjustment to the conditions of modern life than do men (1949, p. 425). The Washo role data can be interpreted as supporting the psychological studies of Hallowell and Caudill.

ROLE BEHAVIOR AND THE NEW TERMINOLOGICAL SYSTEM

554 602 128 593 The data from the role profile test support the inferences presented at the beginning of this chapter. The table of significant distinctions in Appendix II (p. 395, top) presents the relevant data. As predicted: (1) there are no significant distinctions between either the roles of mother's brother and father's brother or the roles of brother's child and sister's child; and (2) the roles of cousins are well distinguished from the roles of siblings. Older brother and younger brother are both distinguished from male cousin seven times. Older sister is distinguished from female cousin nine times; younger sister is distinguished from female cousin three times. That cousins are well distinguished from siblings while mother's brother resembles father's brother and brother's child is similar to sister's child can be clearly seen from figures 2 to 9 on pp. 372-375.

554 601 128 The inference that the roles associated with the stable parts of the kinship terminology all differ significantly from each other is supported reasonably well by the test data. However, there are five apparent exceptions: no significant distinctions exist between the roles of father and mother, son and daughter, younger brother and younger sister, mother's brother and older brother, and mother's brother and father's sister. The first three exceptions can be easily explained. These relatives are nuclear family members of opposite sex and the same generation. They do not differ in the qualities of their roles, but the sex distinction makes for significant differences in the content of the roles. However, the similarity in the qualities of the roles of father and mother and son and daughter is not ignored in the kinship terminology, for the Washo have two terms meaning "parent" and one meaning "child." In only two instances does role behavior fail to agree with terminological usage: mother's brother is not distinguished from either older brother or father's sister. Consequently, of the 120 possible comparisons among the roles of the three generations studied, 118 support the assumption of a close fit of role and terminological system.

554 601 178 602 Since the terminological system is apparently changing in the face of a relatively stable social structure, at least some of the causes of this change lie outside social organization. What are the cultural causes which appear capable of modifying Washo role behavior so as to produce the emerging system of kinship terminology? In the case of the cousin terms, we must seek

[P.391, A]

554
601
178
602

cultural causes which would reduce the importance of cousins as compared to siblings, thus setting the stage for the terminological distinction. This result would tend to follow the introduction of a money economy and the subsequent individualization of the society. As we have seen, coöperative activity has lessened among the Washo; and this presumably has meant that distant relatives are not as important as they once were. Consequently, the roles played by cousins have become progressively different from the roles of siblings, and this has been reflected in the kinship terminology. The

[TEXT CONTINUES TOP OF P. 391, B]

CONCLUSION

178
601
554

This study has presented an analysis of changes in Washo culture and social organization. It has suggested that the changes in the Washo system of kinship terminology can be explained best by the hypothesis that cultural factors may affect kinship terminology directly instead of indirectly by first modifying elements of formal social structure, such as residence rules and kinds of kin groups. This hypothesis hinged on showing that role behavior is closely correlated with kinship terminology. This assumption was substantially verified by data derived from the role profile test; the Washo role behavior was shown to correlate closely with the new, emerging kinship system. Since changes in formal social structure could not adequately account for changes in the terminological system, it was concluded that cultural factors have directly affected role behavior, thereby causing terminological modification. Finally, some possible cultural factors were suggested to account for changes in role behavior.

[TEXT CONTINUES bottom OF P. 391, B]

[P.391, B]

554
601
178
602

merging of mother's brother and father's brother and of brother's child and sister's child probably is due to three major causes. The first is the individualization of the society, which reduces the importance of relatives not in the nuclear family; the second is the loss of nonsororal polygyny; and the third is the knowledge of the English kinship terminology, which may function as a kind of model for the new Washo kinship terminology. The cultural causes of the changes in Washo kinship terminology suggested here must be regarded only as hypotheses. Their verification requires comparative data.

CONCLUSION

554
125

The role profile test provided much of the data upon which the foregoing demonstration has been based. It has shown itself to be a useful and sensitive instrument for the collection of role data. Its principal value is that it can be treated statistically, and this permits objective role comparisons within a society. Such comparisons can be made just as easily between societies, provided the same statistical analysis is used. The test has some limitations. First, it deals only with the qualities of roles and does not test for their content. Second, the categories may have to be modified from society to society, for there is no certainty that the categories used for the Washo would be satisfactory for other tribes. The test is not meant to replace observation and interviewing; but at the same time it reveals role patterning that would escape all but the most careful and prolonged field work. The role profile test seems to me a most promising technique for the study of role behavior.

128 *
554 *
602 *
593 *

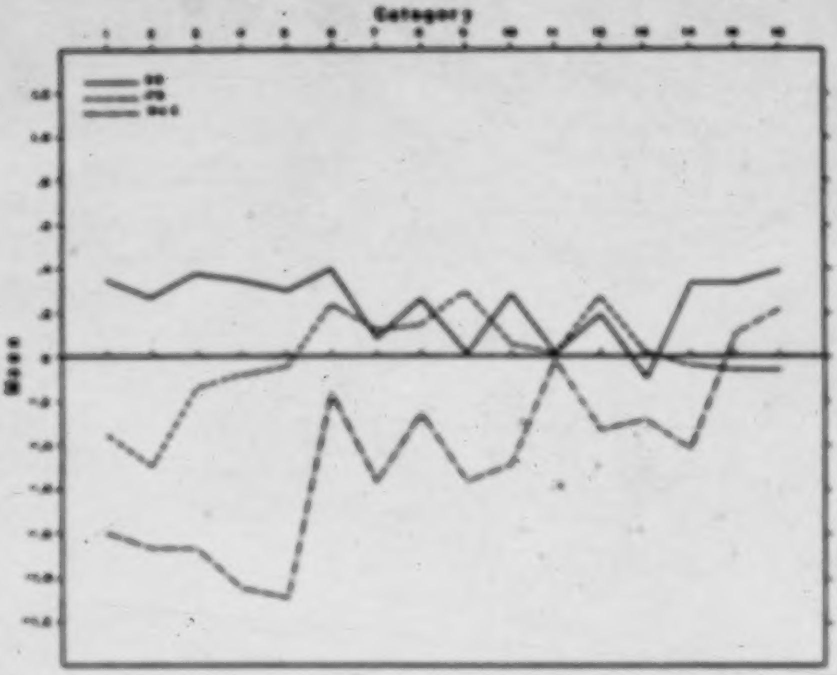


Fig. 5. Comparison of role profiles: older brother, younger brother, and male cousin (male informants).

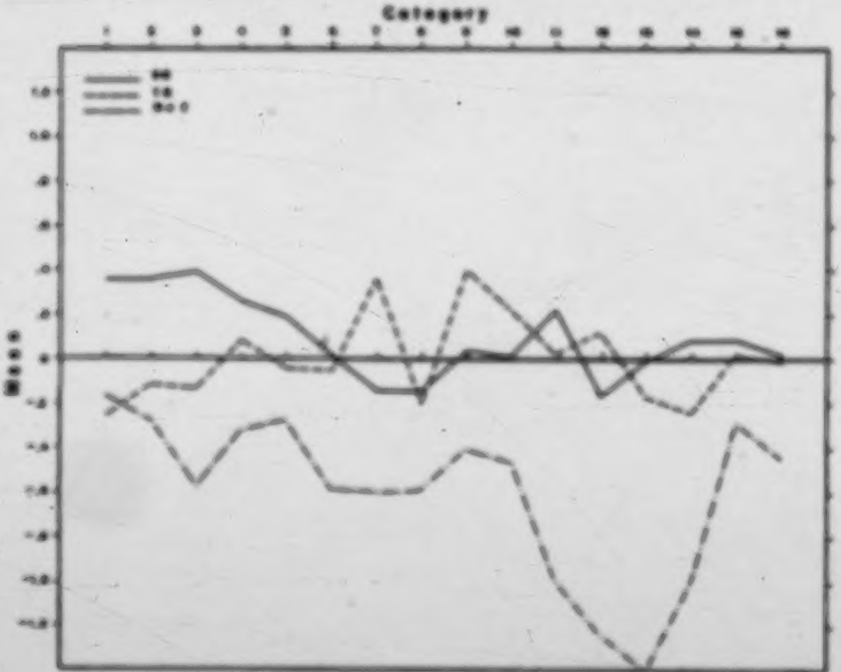


Fig. 6. Comparison of role profiles: older brother, younger brother, and male cousin (female informants).

128*
554*
602*
543*

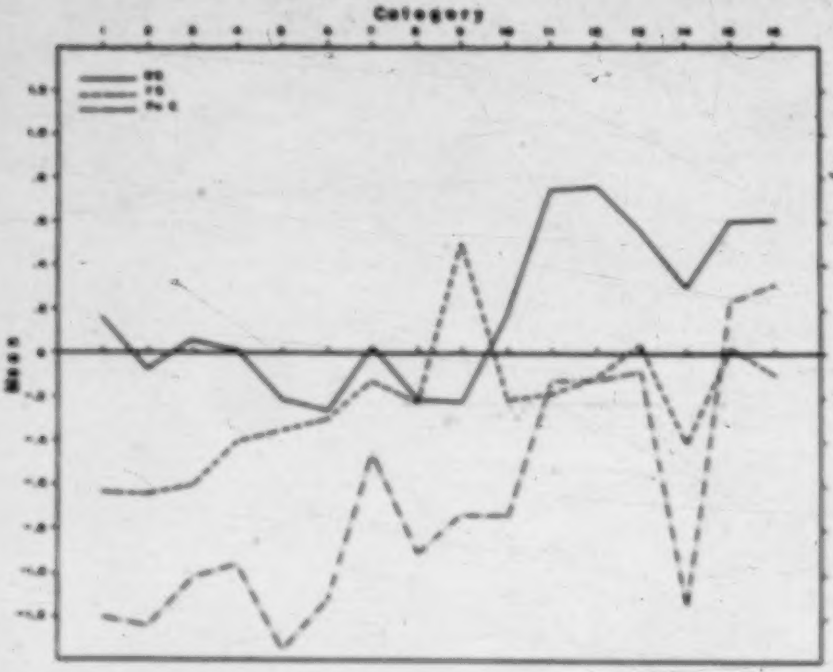
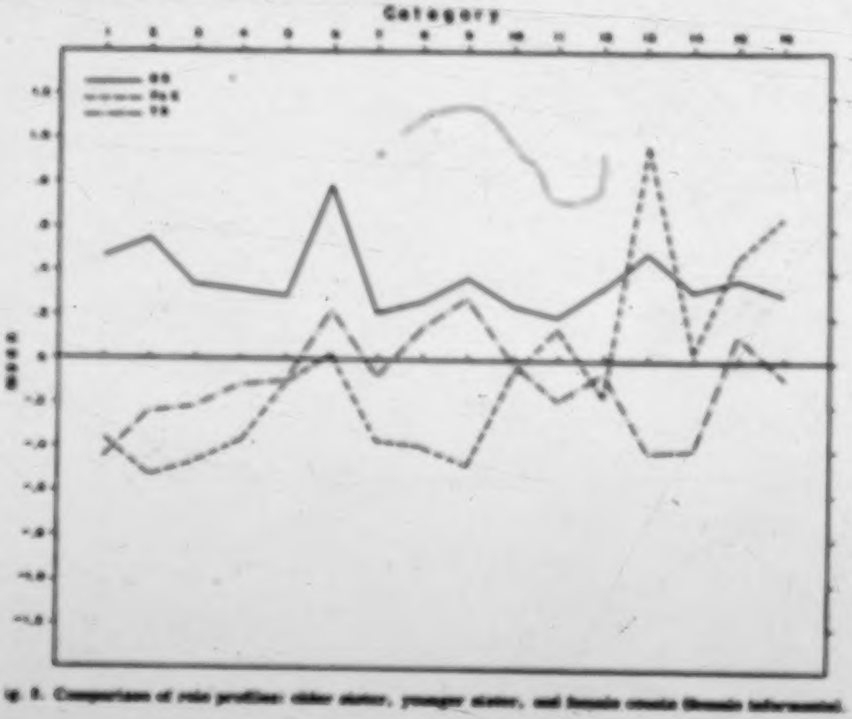


Fig. 4. Comparison of role profiles: older sister, younger sister, and female cousin (male informant).



ig. 5. Comparison of role profiles: older sister, younger sister, and female cousin (female informant).

128*
554*
602*
593*

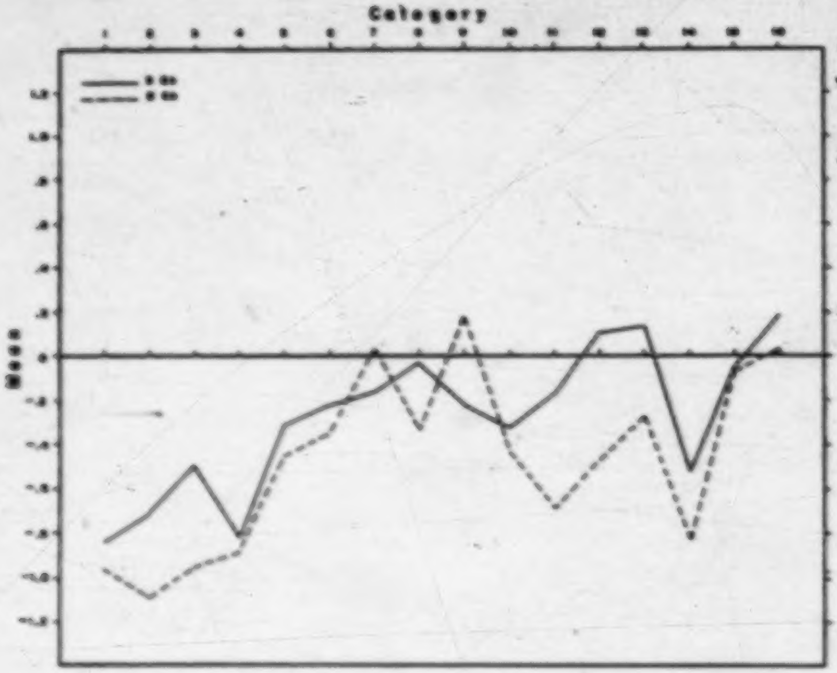


Fig. 6. Comparison of role profiles: brother's child and sister's child (male informants).

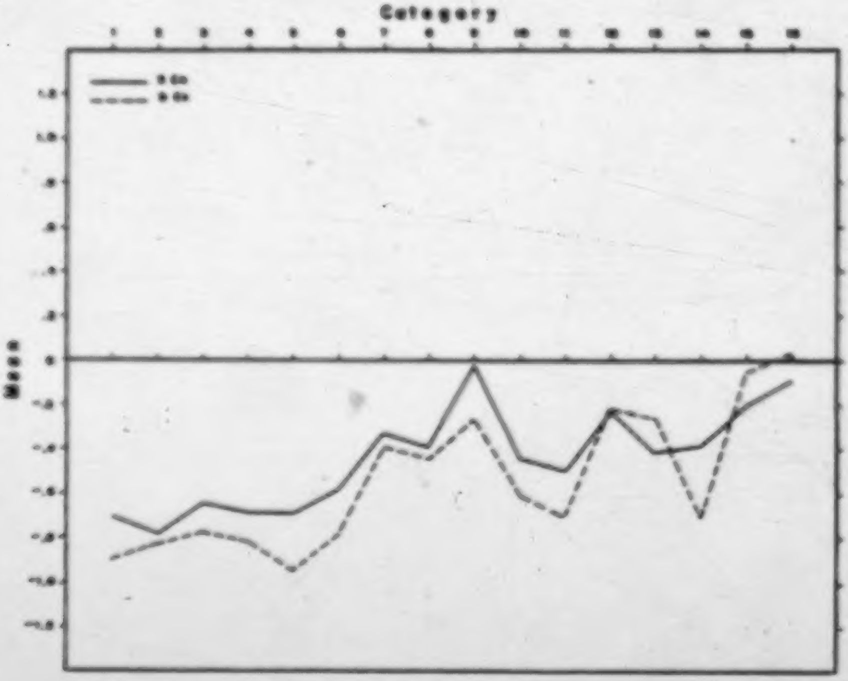


Fig. 7. Comparison of role profiles: brother's child and sister's child (female informants).

128*
554*
602*
593*

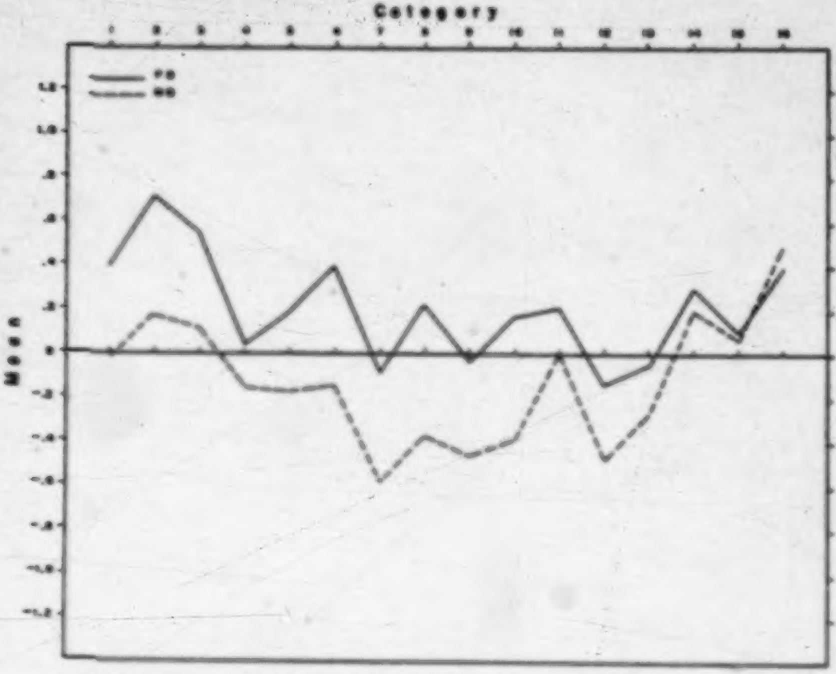


Fig. 5. Comparison of role profiles: father's brother and mother's brother (male informants).

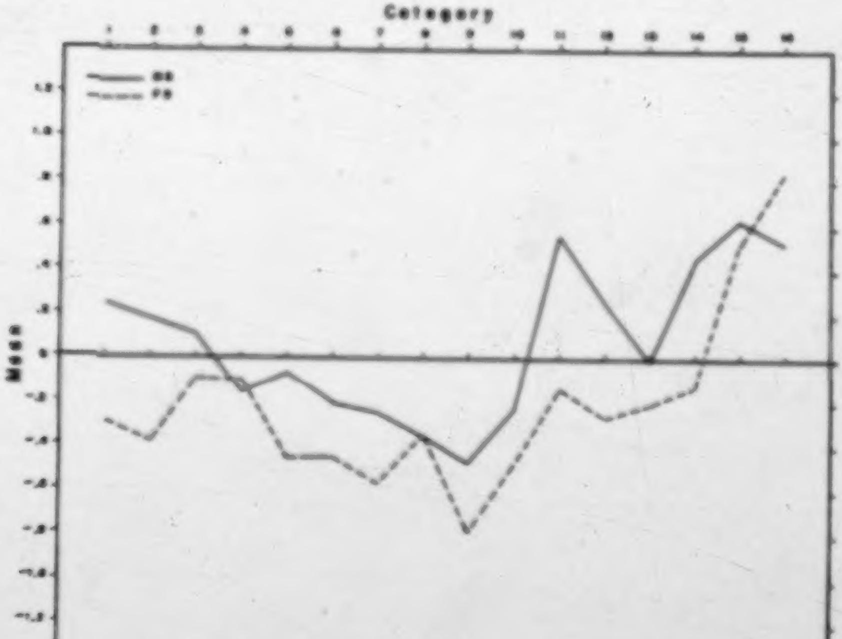


Fig. 6. Comparison of role profiles: father's brother and mother's brother (female informants).

APPENDIXES

[P.377]
[P.376 is blank]

1:Freed E-5 (1952-1957)1960 NT20 Washo NT20

[P. 379, A]
[P. 378 is blank]

APPENDIX I

STATISTICAL ANALYSIS: TABLES OF MEANS, STANDARD ERRORS OF THE MEANS, AND 95 PER CENT CONFIDENCE LIMITS

This appendix contains the statistical analysis of the protocols of the role profile test. The abbreviations are as follows: father (F), father's brother (FB), father's sister (FS), mother (M), mother's brother (MB), mother's sister (MS), older brother (OB), younger brother (YB), older sister (OS), younger sister (YS), male cousin (MaC), female cousin (FeC), son (So), daughter (D), brother's child (BCh), and sister's child (SCh). Each table gives the number (No.), mean ($\bar{X}$), standard error of the mean ($S_{\bar{X}}$), and the 95 per cent confidence limits.

128*
554*
602*
593*

[P. 379, B]

128*
554*
602*
593*

CATEGORY 1

				95% Confidence limits	
	No.	$\bar{X}$	$S_{\bar{X}}$	Lower	Upper
Male					
F	19	1.10	.18	.74	1.46
FB	14	.40	.16	.08	.72
FS	13	.35	.22	- .09	.79
M	20	.76	.14	.48	1.04
MB	12	- .02	.21	- .44	.40
MS	11	.28	.13	.02	.54
OB	14	.35	.19	- .03	.73
YB	17	- .35	.12	- .59	- .11
OS	12	.17	.12	- .07	.41
YS	12	- .63	.20	-1.03	- .23
MaC	5	- .80	.29	-1.38	- .22
FeC	4	-1.20	.20	-1.60	- .80
So	9	- .60	.13	- .86	- .34
D	10	- .93	.14	-1.21	- .65
BCh	10	- .96	.14	-1.24	- .68
SCh	11	- .84	.19	-1.22	- .46
Female					
F	21	.86	.15	.56	1.16
FB	16	- .30	.20	- .70	.10
FS	10	- .09	.31	- .71	.53
M	26	1.02	.10	.82	1.22
MB	15	.25	.26	- .27	.77
MS	18	.60	.15	.30	.90
OB	22	.36	.16	.04	.68
YB	22	- .25	.12	- .49	- .01
OS	24	.47	.12	.23	.71
YS	21	- .44	.17	- .78	- .10
MaC	3	- .16	.14	- .44	.12
FeC	4	- .35	.24	- .83	.13
So	19	- .44	.20	- .84	- .04
D	18	- .49	.14	- .77	- .21
BCh	24	- .89	.13	-1.15	- .63
SCh	25	- .70	.08	- .86	- .54

[P. 379, C]

128*
554*
602*
593*

CATEGORY 2

	No.	$\bar{X}$	$s_{\bar{X}}$	95% Confidence limits	
				Lower	Upper
Male					
F	19	1.23	.08	1.07	1.39
FB	14	.72	.14	.44	1.00
FS	13	.07	.23	- .39	.53
M	20	.99	.10	.79	1.19
MB	12	.18	.19	- .20	.56
MS	11	.15	.16	- .17	.47
OB	14	.27	.08	.11	.43
YB	17	- .49	.08	- .65	- .33
OS	12	- .07	.14	- .35	.21
YS	12	- .64	.13	- .90	- .38
MaC	5	- .87	.23	-1.33	- .41
FeC	4	-1.24	.30	-1.84	- .64
So	9	- .63	.14	- .91	- .35
D	10	-1.11	.13	-1.37	- .85
BCh	10	-1.09	.14	-1.37	- .81
SCh	11	- .71	.12	- .95	- .47
Female					
F	21	.46	.17	.12	.80
FB	16	- .39	.20	- .79	.01
FS	10	- .26	.25	- .76	.24
M	26	1.01	.15	.71	1.31
MB	15	.18	.15	- .12	.48
MS	18	.87	.14	.59	1.15
OB	22	.36	.14	.08	.64
YB	22	- .11	.13	- .37	.15
OS	24	.55	.15	.25	.85
YS	21	- .23	.17	- .57	.11
MaC	3	- .27	.58	-1.43	.89
FeC	4	- .52	.47	-1.46	.42
So	19	- .44	.15	- .74	- .14
D	18	- .45	.17	- .79	- .11
BCh	24	- .82	.11	-1.04	- .60
SCh	26	- .78	.12	-1.02	- .54

7:Freed 2-5 (1952-1957)1960 NT20 Washo NT20

[P.380, A]

128 *
554 *
602 *
593 *

CATEGORY 3

	No.	$\bar{X}$	$s_{\bar{X}}$	95% Confidence limits	
				Lower	Upper
Male					
F	19	.80	.18	.44	1.16
FB	14	.55	.18	.19	.91
FS	13	- .31	.24	- .79	.17
M	20	.80	.18	.44	1.16
MB	12	.12	.11	- .10	.34
MS	11	.04	.17	- .30	.38
OB	14	.38	.17	.04	.72
YB	17	- .14	.16	- .46	.18
OS	12	.06	.19	- .32	.44
YS	12	- .60	.24	-1.08	- .12
MaC	5	- .87	.13	-1.13	- .61
FeC	4	-1.02	.30	-1.62	- .42
So	9	- .20	.28	- .76	.36
D	10	- .83	.22	-1.27	- .39
BCh	10	- .95	.29	-1.53	- .37
SCh	11	- .49	.13	- .75	- .23
Female					
F	21	.76	.19	.38	1.14
FB	16	- .09	.17	- .43	.25
FS	10	- .29	.25	- .79	.21
M	26	1.03	.14	.75	1.31
MB	15	.11	.18	- .25	.47
MS	18	.23	.19	- .15	.61
OB	22	.39	.19	.01	.77
YB	22	- .13	.17	- .47	.21
OS	24	.34	.14	.06	.62
YS	21	- .21	.18	- .57	.15
MaC	3	- .57	.37	-1.31	.17
FeC	4	- .46	.31	-1.08	.16
So	19	- .29	.17	- .63	.05
D	18	- .55	.18	- .91	- .19
BCh	24	- .77	.11	- .99	- .55
SCh	26	- .64	.10	- .84	- .44

7:Freed E-5 (1952-1957)1960 NT20 Washo NT20

[P. 380, B]

128*
554*
602*
593*

CATEGORY 4

	No.	$\bar{X}$	$S_{\bar{X}}$	95% Confidence limits	
				Lower	Upper
Male					
F	19	.77	.17	.43	1.11
FB	14	.04	.21	- .38	.46
FS	13	- .32	.32	- .96	.32
M	20	.89	.14	.61	1.17
MB	12	- .15	.16	- .47	.17
MS	11	.26	.26	- .26	.78
OB	14	.35	.11	.13	.57
YB	17	- .08	.13	- .34	.18
OS	12	.01	.18	- .35	.37
YS	12	- .40	.22	- .84	.04
MaC	5	-1.05	.24	-1.53	- .57
FeC	4	- .96	.26	-1.48	- .44
So	9	- .02	.19	- .40	.36
D	10	- .15	.34	- .83	.53
BCh	10	- .89	.31	-1.51	- .27
SCh	11	- .82	.11	-1.04	- .60
Female					
F	21	.56	.20	.16	.96
FB	16	- .10	.19	- .48	.28
FS	10	- .50	.29	-1.08	.08
M	26	1.01	.15	.71	1.31
MB	15	- .16	.22	- .60	.28
MS	18	.03	.18	- .33	.39
OB	22	.26	.17	- .08	.60
YB	22	.09	.14	- .19	.37
OS	24	.32	.14	.04	.60
YS	21	- .11	.21	- .53	.31
MaC	3	- .32	.11	- .54	- .10
FeC	4	- .37	.20	- .77	.03
So	19	- .07	.17	- .41	.27
D	18	- .10	.21	- .52	.32
BCh	24	- .81	.15	-1.11	- .51
SCh	26	- .68	.09	- .86	- .50

7:Freed E-5 (1952-1957)1960 NT20 Washo NT20

[P. 381, A]

128*
554*
602*
593*

CATEGORY 5

	No.	$\bar{X}$	$S_{\bar{X}}$	95% Confidence limits	
				Lower	Upper
Male					
F	19	.30	.22	- .14	.74
FB	14	.19	.25	- .31	.69
FS	13	- .20	.24	- .68	.28
M	20	.60	.20	.20	1.00
MB	12	- .17	.15	- .47	.13
MS	11	.23	.20	- .17	.63
OB	14	.30	.14	.02	.58
YB	17	- .05	.14	- .33	.23
OS	12	- .21	.25	- .71	.29
YS	12	- .35	.19	- .73	.03
MaC	5	-1.09	.22	-1.53	- .65
FeC	4	-1.35	.13	-1.61	-1.09
So	9	.36	.26	- .16	.88
D	10	.08	.42	- .76	.92
BCh	10	- .45	.33	-1.11	.21
SCh	11	- .31	.24	- .79	.17
Female					
F	20	.69	.16	.37	1.01
FB	15	- .46	.19	- .84	- .08
FS	9	- .45	.34	-1.13	.23
M	25	.93	.11	.71	1.15
MB	15	- .07	.26	- .59	.45
MS	17	.00	.17	- .34	.34
OB	21	.19	.20	- .21	.59
YB	21	- .04	.19	- .42	.34
OS	23	.29	.15	- .01	.59
YS	20	- .09	.22	- .53	.35
MaC	3	- .27	.58	-1.43	.89
FeC	3	- .10	.55	-1.20	1.00
So	18	.25	.18	- .11	.61
D	17	.13	.18	- .23	.49
BCh	23	- .94	.12	-1.18	- .70
SCh	25	- .68	.09	- .86	- .50

7:Freed E-5 (1952-1957)1960 NT20 Washo NT20

[P.381, B]

128 *
554 *
602 *
593 *

CATEGORY 6

	No.	$\bar{X}$	$S_{\bar{X}}$	95% Confidence limits Lower	95% Confidence limits Upper
Male					
F	10	.42	.18	.06	.78
FB	14	.40	.26	- .12	.92
FS	13	- .57	.19	- .95	- .19
M	20	.05	.24	- .43	.53
MB	12	- .14	.21	- .56	.28
MS	11	- .24	.20	- .64	.16
OB	14	.40	.20	.00	.80
YB	17	.24	.18	- .12	.60
OS	12	- .26	.17	- .60	.08
YS	12	- .30	.21	- .72	.12
MaC	5	- .16	.48	-1.12	.80
FeC	4	-1.12	.24	-1.60	- .64
So	9	.70	.30	.10	1.30
D	10	- .09	.29	- .67	.49
BCh	10	- .35	.30	- .95	.25
SCh	11	- .22	.30	- .82	.38
Female					
F	20	.10	.19	- .28	.48
FB	15	- .45	.21	- .87	- .03
FS	10	- .63	.27	-1.17	- .09
M	25	.74	.18	.38	1.10
MB	15	- .21	.17	- .55	.13
MS	17	- .08	.17	- .42	.26
OB	21	.01	.14	- .27	.29
YB	21	- .05	.11	- .27	.17
OS	23	.79	.12	.55	1.03
YS	20	.23	.23	- .23	.69
MaC	2	- .58	.27	-1.12	- .04
FeC	3	.03	.57	-1.11	1.17
So	18	- .03	.24	- .51	.45
D	17	.56	.16	.24	.88
BCh	23	- .77	.17	-1.11	- .43
SCh	25	- .58	.14	- .86	- .30

[P.382, A]

128 *
554 *
602 *
593 *

CATEGORY 7

	No.	$\bar{X}$	$S_{\bar{X}}$	95% Confidence limits	
				Lower	Upper
Male					
F	18	.23	.21	- .19	.65
FB	14	- .08	.20	- .48	.32
FS	13	- .47	.28	-1.03	.09
M	20	.61	.19	.23	.99
MB	12	- .58	.18	- .94	- .22
MS	11	- .14	.21	- .56	.28
OB	14	.08	.22	- .36	.52
YB	17	.12	.21	- .30	.54
OS	12	.03	.20	- .37	.43
YS	12	- .12	.20	- .52	.28
MaC	5	- .56	.57	-1.70	.58
FeC	4	- .45	.51	-1.47	.57
So	9	.27	.27	- .27	.81
D	10	.06	.35	- .64	.76
BCh	10	.03	.26	- .49	.55
SCh	11	- .17	.31	- .79	.45
Female					
F	20	.03	.20	- .37	.43
FB	15	- .57	.21	- .99	- .15
FS	10	- .34	.34	-1.02	.34
M	25	.19	.18	- .17	.55
MB	15	- .25	.21	- .67	.17
MS	17	- .39	.21	- .81	.03
OB	21	- .14	.17	- .48	.20
YB	21	.36	.15	.06	.66
OS	23	.22	.18	- .14	.58
YS	20	- .07	.19	- .45	.31
MaC	2	- .59	.20	- .99	- .19
FeC	3	- .36	.23	- .82	.10
So	18	.70	.18	.34	1.06
D	17	.90	.22	.46	1.34
BCh	23	- .39	.16	- .71	- .07
SCh	25	- .32	.14	- .60	- .04

T:Found E-S (1952-1957)1960 NT20 Washo NT20

[P 382, B]

128 *
554 *
602 *
593 *

CATEGORY 8

				95% Confidence limits	
	No.	$\bar{X}$	$s_{\bar{x}}$	Lower	Upper
Male					
F	10	.16	.19	- .22	.54
FB	14	.23	.28	- .33	.79
FS	13	- .53	.30	-1.13	.07
M	20	.34	.21	- .08	.76
MB	12	- .37	.21	- .79	.05
MS	11	.07	.20	- .33	.47
OB	16	.26	.15	- .04	.56
YB	17	.14	.17	- .20	.48
OS	12	- .21	.22	- .65	.23
YS	12	- .33	.23	- .80	.14
MaC	5	- .26	.55	-1.36	.84
FeC	4	- .81	.26	-1.43	- .20
So	9	.63	.27	.08	1.16
D	10	- .03	.36	- .75	.69
DCh	10	- .34	.27	- .88	.20
SCh	11	- .03	.26	- .55	.49
Female					
F	20	.28	.21	- .14	.70
FB	15	- .35	.24	- .83	.13
FS	10	- .60	.29	-1.18	- .02
M	25	.54	.16	.22	.86
MB	15	- .36	.16	- .68	- .04
MS	17	- .34	.20	- .84	.16
OB	21	- .14	.17	- .48	.20
YB	21	- .20	.21	- .62	.22
OS	23	.26	.16	- .06	.58
YS	20	.15	.22	- .29	.59
MaC	3	- .58	.27	-1.12	- .04
FeC	3	- .39	.34	-1.07	.29
So	16	.45	.20	.05	.85
D	17	.82	.19	.44	1.20
DCh	23	- .44	.15	- .74	- .14
SCh	25	- .39	.15	- .69	- .09

TriPanel B-5 (1952-1957)1960 NTSU Washo NTSU

[P 383, A]

CATEGORY 9

128*
554*
602*
593*

	No.	$\bar{X}$	$s_{\bar{X}}$	95% Confidence limits	
				Lower	Upper
Male					
F	19	- .09	.21	- .51	.33
FB	14	- .03	.19	- .39	.33
FS	13	- .70	.25	-1.20	- .20
M	20	.19	.19	- .19	.57
MB	13	- .46	.19	- .84	- .08
MS	11	- .10	.23	- .56	.36
CB	14	.01	.23	- .45	.47
YB	17	.29	.19	- .09	.67
CS	13	- .23	.19	- .60	.18
YS	13	.50	.23	.04	.96
MaC	5	- .57	.36	-1.30	.15
FeC	4	- .73	.36	-1.45	- .01
So	9	.83	.27	.29	1.37
D	16	.45	.28	- .11	1.01
BCh	10	.19	.34	- .50	.88
SCh	11	- .23	.33	- .88	.42
Female					
F	30	- .16	.21	- .58	.26
FB	13	- .79	.14	-1.07	- .51
FS	10	- .85	.21	-1.27	- .43
M	25	.14	.18	- .22	.50
MB	15	- .48	.21	- .90	- .06
MS	17	- .47	.17	- .81	- .13
CB	21	.04	.21	- .38	.46
YB	21	.40	.17	.06	.74
CS	33	.37	.14	.09	.65
YS	30	.28	.19	- .10	.66
MaC	2	- .40	.40	-1.20	.40
FeC	3	- .47	.36	-1.19	.25
So	16	.63	.18	.27	.99
D	17	.61	.18	.25	.97
BCh	33	- .26	.19	- .64	.12
SCh	35	- .03	.15	- .33	.27

TrPond 3-5 (1953-1957)1960 NTBD Wado NTBD

[P. 383, B]

128 *
554 *
602 *
593 #

CATEGORY 10

	No.	$\bar{X}$	$s_{\bar{X}}$	95% Confidence limits	
				Lower	Upper
Male					
F	18	.23	.21	- .18	.65
FD	14	.17	.19	- .21	.55
FS	13	- .59	.27	-1.11	- .07
M	20	.54	.20	.14	.94
MD	12	- .39	.19	- .77	- .01
MS	11	.09	.22	- .35	.53
CD	16	.28	.21	- .13	.69
YD	17	.06	.13	- .20	.31
CS	13	.18	.28	- .38	.74
YS	12	- .21	.25	- .71	.29
MaC	5	- .49	.53	-1.53	.55
FaC	4	- .73	.45	-1.61	.15
Sb	9	.25	.36	- .47	.97
D	16	.03	.29	- .54	.60
DCh	16	- .43	.30	-1.03	.17
SCh	11	- .33	.27	- .86	.20
Female					
F	20	.44	.15	.13	.75
FD	15	- .44	.25	- .93	.05
FS	10	- .33	.36	-1.05	.39
M	25	.72	.14	.44	1.00
MD	15	- .24	.19	- .63	.14
MS	17	- .54	.19	- .92	- .16
CD	21	.01	.17	- .33	.35
YD	21	.22	.17	- .12	.56
CS	23	.25	.16	- .07	.57
YS	20	- .01	.23	- .47	.45
MaC	3	- .46	.16	- .78	- .14
FaC	3	- .05	.20	- .44	.34
Sb	18	.33	.21	- .09	.75
D	17	.30	.21	- .12	.72
DCh	23	- .60	.17	- .94	- .26
SCh	25	- .43	.15	- .73	- .13

T:Freed S-5 (1952-1957)1960 NT20 Washo NT20

[P. 384, A]

128*
554*
602*
593*

CATEGORY 11

	No.	$\bar{X}$	$s_{\bar{X}}$	95% Confidence Limits	
				Lower	Upper
Male					
F	19	.07	.21	- .35	.49
FB	14	.21	.25	- .29	.71
FS	13	.54	.19	.16	.92
M	20	- .30	.17	- .64	.04
MB	12	.00	.18	- .36	.36
MS	11	.34	.15	.04	.64
OB	14	.01	.20	- .39	.41
YB	17	.01	.30	- .59	.61
OS	12	.75	.19	.37	1.13
YS	12	- .18	.24	- .66	.30
MaC	5	- .02	.64	-1.30	1.26
FeC	4	- .12	.57	-1.26	1.02
So	9	- .16	.32	- .80	.48
D	10	- .55	.35	-1.25	.15
BCh	10	- .69	.26	-1.21	- .17
SCh	11	- .17	.30	- .77	.43
Female					
F	10	.58	.23	.13	1.04
FB	14	- .14	.21	- .56	.28
FS	8	.26	.38	- .50	1.02
M	24	.53	.21	.11	.95
MB	14	.56	.16	.24	.88
MS	14	- .10	.21	- .52	.32
OB	20	.22	.16	- .10	.54
YB	20	.02	.17	- .32	.36
OS	22	.20	.17	- .14	.54
YS	20	- .18	.18	- .54	.18
MaC	2	- .99	.68	-2.35	.37
FeC	3	.15	.29	- .43	.73
So	18	- .06	.21	- .48	.36
D	17	- .36	.20	- .76	.04
BCh	25	- .70	.15	-1.00	- .40
SCh	24	- .49	.14	- .77	- .21

1:Freed E-5 (1952-1957)1960 NT20 Washo NT20

[P. 384, B]

128 *
554 *
602 *
593 *

CATEGORY 12

	No.	$\bar{X}$	$S_{\bar{X}}$	95% Confidence limits	
				Lower	Upper
Male					
F	18	.09	.27	- .45	.63
FB	14	- .14	.24	- .62	.34
FS	13	.33	.26	- .19	.85
M	20	- .12	.16	- .44	.20
MB	12	- .48	.28	-1.04	.08
MS	11	.20	.17	- .14	.54
OB	14	.19	.20	- .21	.59
YB	17	.27	.19	- .11	.65
OS	12	.76	.20	.36	1.16
YS	12	- .11	.21	- .53	.31
MaC	5	- .33	.53	-1.39	.73
FeC	4	- .12	.57	-1.26	1.02
So	9	- .38	.24	- .86	.10
D	10	- .41	.32	-1.05	.23
BCh	10	- .47	.22	- .91	- .03
SCh	11	.11	.28	- .45	.67
Female					
F	19	- .35	.17	- .69	- .01
FB	14	- .27	.23	- .73	.19
FS	9	- .46	.42	-1.30	.38
M	24	.11	.19	- .27	.49
MB	14	.26	.26	- .26	.78
MS	16	.35	.22	- .09	.79
OB	20	- .17	.22	- .61	.27
YB	20	.12	.14	- .16	.40
OS	22	.33	.21	- .09	.75
YS	20	- .05	.17	- .39	.29
MaC	2	-1.23	.44	-2.11	- .35
FeC	3	- .16	.31	- .78	.46
So	18	.31	.24	- .17	.79
D	17	.29	.20	- .11	.69
BCh	22	- .21	.18	- .57	.15
SCh	24	- .22	.17	- .56	.12

Tyfreed F-5 (1952-1957)1960 NT50 Washo NT50

[P. 385, A]

128 *
554 *
602 *
543 *

CATEGORY 13

	No.	$\bar{X}$	$s_{\bar{X}}$	95% Confidence limits	
				Lower	Upper
		Male			
F	19	- .08	.10	- .46	.30
FB	14	- .05	.21	- .47	.37
FS	13	.43	.28	- .13	.99
M	20	- .09	.21	- .51	.33
MB	12	- .27	.31	- .89	.35
MS	11	.60	.15	.30	.90
OB	14	- .10	.25	- .60	.40
YB	17	.02	.19	- .36	.40
OS	12	.54	.29	.04	1.12
YS	12	.04	.16	- .28	.36
MaC	5	- .29	.48	-1.25	.67
FeC	4	- .08	.69	-1.46	1.30
So	9	- .28	.22	- .72	.16
D	10	- .64	.24	-1.12	- .16
BCh	10	- .27	.29	- .85	.31
SCh	11	.14	.26	- .38	.66
		Female			
F	19	.13	.17	- .21	.47
FB	14	- .21	.26	- .73	.31
FS	9	.46	.44	- .42	1.34
M	24	.15	.19	- .23	.53
MB	16	- .01	.22	- .45	.43
MS	16	.53	.24	.05	1.01
OB	20	- .01	.17	- .35	.33
YB	20	- .16	.18	- .52	.20
OS	22	.49	.18	.13	.85
YS	20	- .41	.20	- .81	- .01
MaC	2	-1.40	.28	-1.96	- .84
FeC	3	.98	.34	.30	1.66
So	18	.08	.23	- .38	.54
D	17	- .03	.17	- .37	.31
BCh	22	- .26	.13	- .52	.00
SCh	24	- .41	.18	- .77	- .05

[illegible] 2-5 (1955-1957)1960 [illegible]

[P. 385, B]

128*
554*
602*
593*

CATEGORY 14

	No.	$\bar{X}$	$s_{\bar{x}}$	95% Confidence Limits	
				Lower	Upper
Male					
F	16	.70	.24	.22	1.18
FB	14	.30	.18	-.08	.68
FS	13	-.25	.19	-.61	.10
M	20	.51	.20	.11	.91
MB	12	.20	.24	-.28	.68
MS	11	.38	.17	.04	.72
OB	14	.23	.19	-.15	.61
YB	17	-.04	.21	-.46	.38
OS	12	.30	.18	-.08	.68
YS	12	-.41	.17	-.75	-.07
MaC	5	-.43	.30	-1.03	.18
FeC	4	-1.13	.24	-1.61	-.65
So	9	-.53	.23	-.99	-.07
D	10	-.85	.18	-1.21	-.49
DCh	10	-.84	.21	-1.26	-.42
SCh	11	-.52	.11	-.74	-.30
Female					
F	10	.73	.27	.19	1.27
FB	14	-.13	.24	-.61	.35
FS	9	-.15	.40	-.95	.65
M	24	.57	.17	.23	.91
MB	14	.43	.22	-.01	.87
MS	16	.21	.19	-.17	.59
OB	20	.08	.16	-.24	.40
YB	20	-.24	.14	-.52	.04
OS	22	.32	.14	.04	.60
YS	20	-.40	.19	-.79	-.02
MaC	3	-.99	.60	-2.25	.27
FeC	3	.04	.09	-.14	.22
So	10	.15	.22	-.29	.59
D	17	-.24	.23	-.70	.22
DCh	22	-.71	.15	-1.01	-.41
SCh	24	-.38	.09	-.56	-.20

[P 386, A]

CATEGORY 10

128 *
554 *
602 *
593 *

	No.	$\bar{Y}$	$s_{\bar{Y}}$	95% Confidence limits	
				Lower	Upper
Male					
F	10	-.40	.22	-.84	.04
FB	14	.10	.21	-.33	.53
FS	13	.62	.20	.22	1.03
M	20	-.45	.17	-.80	-.11
MB	12	.08	.21	-.35	.48
MS	11	.35	.18	-.03	.73
CB	14	.33	.18	-.06	.71
VB	17	-.08	.18	-.44	.28
CS	12	.60	.24	.12	1.08
VS	12	.42	.23	-.04	.88
MaC	5	.10	.43	-1.10	1.30
PaC	4	.24	.41	-1.06	1.54
Sr	9	-.12	.22	-.54	.32
D	10	-.37	.29	-.95	.21
DCh	10	-.07	.28	-.65	.51
SCh	11	-.05	.28	-.61	.51
Female					
F	10	-.30	.22	-.79	.18
FB	14	.31	.10	.10	.52
FS	9	.65	.30	-.05	1.35
M	24	-.38	.18	-.74	-.02
MB	14	.63	.22	.18	1.07
MS	16	.59	.13	.33	.85
CB	20	.09	.21	-.33	.51
VB	20	.02	.18	-.34	.38
CS	22	.37	.20	-.03	.77
VS	20	.13	.15	-.16	.42
MaC	2	-.30	1.60	-2.08	2.32
PaC	3	.47	.30	-.25	1.19
Sr	18	-.68	.12	-.94	-.42
D	17	-.72	.13	-1.00	-.42
DCh	22	-.05	.17	-.40	.30
SCh	24	-.30	.10	-.50	.10

[illegible] (1962-1967)[illegible]

[P.386, B]

128*
554*
602*
593*

CATEGORY 10

	No.	$\bar{X}$	$s_{\bar{X}}$	95% Confidence Limits	
				Lower	Upper
Male					
F	19	-.34	.19	-.74	.05
FB	14	.39	.21	-.03	.81
FS	13	.69	.14	.41	.97
M	30	-.65	.17	-.99	-.31
MB	12	.49	.18	.13	.89
MS	11	.43	.19	.05	.81
CB	14	.39	.18	.01	.77
YB	17	-.08	.20	-.48	.34
CS	13	.61	.20	.17	1.05
YS	13	-.10	.17	-.44	.24
MmC	5	.31	.37	-.63	1.35
FaC	4	.31	.41	-1.01	1.63
Br	9	-1.00	.13	-1.30	-.70
D	10	-1.14	.16	-1.48	-.80
BCh	10	.03	.19	-.35	.41
SCh	11	.19	.20	-.41	.79
Female					
F	19	-.35	.20	-.85	.15
FB	16	.84	.20	.44	1.24
FS	9	.76	.23	.12	1.40
M	34	-.51	.18	-.87	-.15
MB	14	.52	.20	.12	.92
MS	18	.61	.14	.33	.89
CB	30	.03	.15	-.28	.33
YB	30	-.01	.18	-.37	.35
CS	32	.30	.17	-.04	.64
YS	30	-.07	.18	-.45	.31
MmC	3	-.44	1.23	-3.90	3.02
FaC	3	.65	.53	-.38	1.68
Br	18	-.67	.17	-1.01	-.33
D	17	-.67	.17	-1.01	-.33
BCh	23	.03	.20	-.37	.43
SCh	34	-.09	.16	-.41	.23

APPENDIX II

STATISTICAL ANALYSIS: COMPARISON OF ROLES

This appendix is a comparison of the differences in the means of the roles of all relatives in all categories. When the 95 per cent confidence intervals about the means fail to overlap, the roles are considered to differ significantly. The x's in the tables indicate that the 95 per cent confidence intervals of two given roles fail to overlap and that the difference in behavior of these two roles is therefore significant. First, the comparison is given by category. Then, on page 395 (top), there is a table which is a summation of the preceding sixteen categories.

The table at the bottom of page 395 compares the mean of a particular relative as rated by males with the mean of the same relative as rated by females. The comparison is made for all relatives in all categories. When the confidence intervals fail to overlap, they are marked with an x.

The abbreviations are the same as those used in Appendix I.

[P.389,A]

128 *
554 *
602 *
573 *

T:Freed 2-5 (1952-1957)1960 NT20 Washo NT20

[P.387, B]

128 *
554 *
602 *
593 *

CATEGORY 1

Male

	F	FB	FS	M	MB	MS	OB	YB	OS	YS	MeC	FeC	Se	D	BCh	SCh
F		●			●	●	●	●	●	●	●	●	●	●	●	●
FB								●		●	●	●	●	●	●	●
FS								●		●	●	●	●	●	●	●
M					●			●	●	●	●	●	●	●	●	●
MB												●		●	●	●
MS								●		●	●	●	●	●	●	●
OB								●		●	●	●	●	●	●	●
YB									●			●		●	●	
OS										●	●	●	●	●	●	●
YS																
MeC																
FeC																
Se																
D																
BCh																
SCh																

Female

	F	FB	FS	M	MB	MS	OB	YB	OS	YS	MeC	FeC	Se	D	BCh	SCh
F		●	●					●		●	●	●	●	●	●	●
FB				●		●			●							
FS				●												
M					●		●	●	●	●	●	●	●	●	●	●
MB															●	●
MS								●		●	●	●	●	●	●	●
OB								●		●			●	●	●	●
YB									●						●	●
OS										●	●	●	●	●	●	●
YS																
MeC															●	●
FeC																
Se																
D																
BCh																
SCh																

7tFreed E-5 (1952-1957)1960 NT20 Washo NT20

[P.387, C]

128 *
554 *
602 *
593 *

CATEGORY 2

Male

	F	FB	FS	M	MB	MS	OB	YB	OS	YS	MaC	FeC	So	D	BCh	SCh
F		x	x		x	x	x	x	x	x	x	x	x	x	x	x
FB							x	x	x	x	x	x	x	x	x	x
FS				x							x	x		x	x	x
M					x	x	x	x	x	x	x	x	x	x	x	x
MB								x		x	x	x	x	x	x	x
MS								x		x	x	x	x	x	x	x
OB								x		x	x	x	x	x	x	x
YB														x	x	
OS										x	x	x		x	x	x
YS																
MaC																
FeC																
So																
D																
BCh																
SCh																

Female

	F	FB	FS	M	MB	MS	OB	YB	OS	YS	MaC	FeC	So	D	BCh	SCh
F		x								x			x	x	x	x
FB				x		x	x		x							
FS				x		x			x							
M					x		x	x		x		x	x	x	x	x
MB						x							x		x	x
MS								x		x		x	x	x	x	x
OB													x	x	x	x
YB									x						x	x
OS										x			x	x	x	x
YS															x	
MaC																
FeC																
So																
D																
BCh																
SCh																

?:Freed E-5 (1952-1957)1960 NT20 Washo NT20

[P. 388, A]

128 *
554 *
602 *
593 *

CATEGORY 3

Male

	F	FB	FS	M	MB	MS	OB	YB	OS	YS	MaC	FeC	So	D	BCh	SCh
F			x		x	x		x		x	x	x	x	x	x	x
FB			x					x		x	x	x		x	x	x
FS				x												
M					x	x		x		x	x	x	x	x	x	x
MB										x	x	x		x	x	x
MS											x	x		x	x	
OB										x	x	x		x	x	x
YB											x					
OS											x	x		x	x	
YS																
MaC																
FeC																
So																
D																
BCh																
SCh																

Female

	F	FB	FS	M	MB	MS	OB	YB	OS	YS	MaC	FeC	So	D	BCh	SCh
F		x	x					x		x	x	x	x	x	x	x
FB				x											x	x
FS				x												
M					x	x		x	x	x	x	x	x	x	x	x
MB															x	x
MS														x	x	x
OB														x	x	x
YB															x	
OS													x	x	x	x
YS																
MaC																
FeC																
So																
D																
BCh																
SCh																

7:Freed E-5 (1952-1957)1960 NT20 Washo NT20

[P.388, B]

128 *
554 *
602 *
593 *

CATEGORY 4

Male

	F	FB	FS	M	MB	MS	OB	YB	OS	YS	MaC	FeC	So	D	BCh	SCh
F			x		x			x	x	x	x	x	x		x	x
FB				x							x	x				x
FS				x												
M					x		x	x	x	x	x	x	x	x	x	x
MB											x					x
MS											x	x			x	x
OB										x	x	x			x	x
YB											x	x				x
OS											x	x				x
YS																
MaC													x			
FeC													x			
So																x
D																
BCh																
SCh																

Female

	F	FB	FS	M	MB	MS	OB	YB	OS	YS	MaC	FeC	So	D	BCh	SCh
F			x								x	x			x	x
FB				x											x	x
FS				x												
M					x	x	x	x	x	x	x	x	x	x	x	x
MB																
MS															x	x
OB											x				x	x
YB															x	x
OS											x	x			x	x
YS																
MaC																
FeC																
So															x	x
D																
BCh																
SCh																

7:Freed E-5 (1952-1957)1960 NT20 Washo NT20

[P.389, A]

128 *
554 *
602 *
593 *

CATEGORY 5

Male

	F	FB	FS	M	MB	MS	OB	YB	OS	YS	MaC	FeC	So	D	BCh	SCh
F											x	x				
FB											x	x				
FS												x				
M					x✓					x	x	x				x
MB											x	x				
MS											x	x				
OB											x	x				
YB											x	x				
OS												x				
YS												x				
MaC													x			
FeC													x	x		x
So																
D																
BCh																
SCh																

Female

	F	FB	FS	M	MB	MS	OB	YB	OS	YS	MaC	FeC	So	D	BCh	SCh
F		x	x			x		x		x					x	x
FB				x					x							
FS				x												
M					x	x	x	x	x	x			x	x	x	x
MB															x	
MS															x	x
OB															x	x
YB															x	x
OS															x	x
YS															x	
MaC																
FeC																
So															x	x
D															x	x
BCh																
SCh																

T:Freed E-5 (1952-1957)1960 NT20 Washo NT20

[P.389, B]

CATEGORY 6

128 *
554 *
602 *
593 *

Male

	F	FB	FS	M	MB	MS	OB	YB	OS	YS	MaC	FeC	So	D	BCh	SCh
F			x									x				
FB			x									x				
FS							x	x					x			
M												x				
MB												x				
MS																
OB												x				
YB												x				
OS												x	x			
YS																
MaC																
FeC													x			
So																
D																
BCh																
SCh																

Female

	F	FB	FS	M	MB	MS	OB	YB	OS	YS	MaC	FeC	So	D	BCh	SCh
F									x						x	x
FB				x					x					x		
FS				x					x					x		
M					x	x	x	x			x				x	x
MB									x					x		
MS									x						x	
OB									x						x	x
YB									x					x	x	x
OS											x		x		x	x
YS															x	x
MaC														x		
FeC																
So																
D															x	x
BCh																
SCh																

7:Freed E-5 (1952-1957)1960 NT20 Washo NT20

[P. 390, A]

128 *
554 *
602 *
593 *

CATEGORY 7

Male

	F	FB	FS	M	MB	MS	OB	YB	OS	YS	MaC	FeC	So	D	BCh	SCh
F					x											
FB																
FS				x												
M					x											
MB																
MS																
OB																
YB																
OS																
YS																
MaC																
FeC																
So																
D																
BCh																
SCh																

Female

	F	FB	FS	M	MB	MS	OB	YB	OS	YS	MaC	FeC	So	D	BCh	SCh
F														x		
FB								x	x				x	x		
FS														x		
M											x					
MB													x	x		
MS								x					x	x		
OB													x	x		
YB											x				x	x
OS											x					
YS													x	x		
MaC													x	x		
FeC													x	x		
So															x	x
D															x	x
BCh																
SCh																

7:Freed E-5 (1952-1957)1960 NT20 Washo NT20

[P.390, B]

CATEGORY 8

128 *
554 *
602 *
593 *

Male																
	F	FB	FS	M	MB	MS	OB	YB	OS	YS	MeC	FeC	So	D	BCh	SCh
F												x				
FB												x				
FS													x			
M												x				
MB													x			
MS												x				
OB												x				
YB												x				
OS																
YS																
MaC																
FeC													x			
So																
D																
BCh																
SCh																

Female																
	F	FB	FS	M	MB	MS	OB	YB	OS	YS	MeC	FeC	So	D	BCh	SCh
F																
FB				x										x		
FS				x									x	x		
M					x	x	x				x				x	x
MB													x	x		
MS														x		
OB														x		
YB														x		
OS															x	x
YS																
MaC													x	x		
FeC														x		
So															x	x
D															x	x
BCh																
SCh																

7:Freed B-5 (1952-1957)1960 NT20 Washo NT20

[P.391, A]

CATEGORY 9

128*
554*
602*
593*

Male	F	FB	FS	M	MB	MS	OB	YB	OS	YS	MaC	FeC	So	D	BCh	SCh
F																
FB																
FS				x				x		x			x	x		
M																
MB										x			x			
MS																
OB																
YB																
OS													x			
YS												x				
MaC													x			
FeC													x			
So																
D																
BCh																
SCh																

Female	F	FB	FS	M	MB	MS	OB	YB	OS	YS	MaC	FeC	So	D	BCh	SCh
F													x			
FB				x			x	x	x	x			x	x		x
FS				x			x	x	x	x			x	x		x
M																
MB								x	x				x	x		
MS								x	x	x			x	x		
OB																
YB																
OS																
YS																
MaC																
FeC													x			
So															x	
D															x	
BCh																
SCh																

7:Fused E-5 (1952-1957)1960 NT20 Washo NT20

[P 391, B]

928 *
554 *
602 *
593 *

CATEGORY 10

Male

	F	FB	FS	M	MB	MS	OB	YB	OS	YS	MaC	FeC	So	D	BCh	SCh
F																
FB																
FS				x												
M					x											
MB																
MS																
OB																
YB																
OS																
YS																
MaC																
FeC																
So																
D																
BCh																
SCh																

Female

	F	FB	FS	M	MB	MS	OB	YB	OS	YS	MaC	FeC	So	D	BCh	SCh
F		x			x	x					x				e	e
FB				x												
FS				x												
M					x	x	x				x	f			e	e
MB																
MS								x	x				e	e		
OB																
YB											x				e	e
OS											x				e	e
YS																
MaC													e	e		
FeC																
So															e	e
D															e	e
BCh																
SCh																

[illegible] (1955-1957)1960 [illegible]

[P392, A]

128*
554*
602*
593*

CATEGORY 11

Male

	F	FB	FS	M	MB	MS	OB	YB	OS	YS	MaC	FeC	So	D	BCh	SCh
F																
FB																
FS				●										●	●	
M									●							
MB									●							
MS															●	
OB																
YB																
OS										●				●	●	
YS																
MaC																
FeC																
So																
D																
BCh																
SCh																

Female

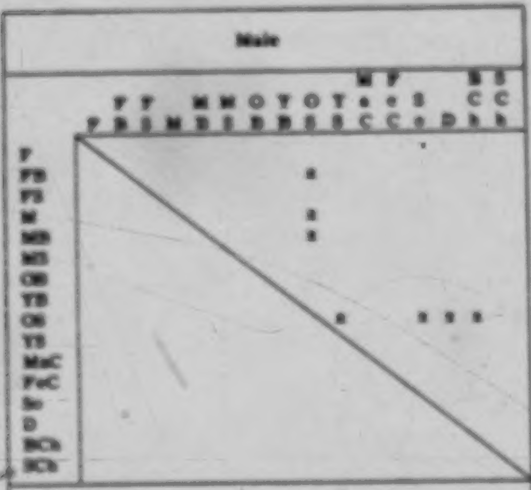
	F	FB	FS	M	MB	MS	OB	YB	OS	YS	MaC	FeC	So	D	BCh	SCh
F														●	●	●
FB																
FS																
M														●	●	●
MB								●						●	●	●
MS																
OB															●	●
YB															●	
OS															●	●
YS																
MaC																
FeC																
So																
D																
BCh																
SCh																

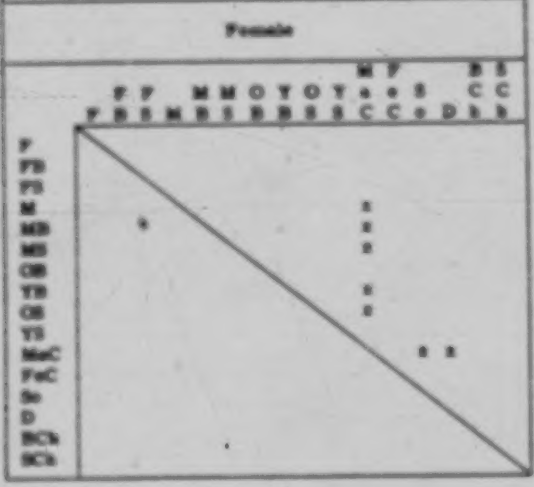
Ti/rasd 2-8 (1858-1937)1980 NT80 Washo NT80

[P.392, B]

128*
554*
602*
543*

CATEGORY 12


Male
F
FB
FZ
M
MB
MZ
OB
YB
OZ
YZ
MaC
FeC
So
D
BCh
ZCh


Female
F
FB
FZ
M
MB
MZ
OB
YB
OZ
YZ
MaC
FeC
So
D
BCh
ZCh

?Pomo? E-8 (1902-1937)1960 NTBO Washo NTBO

[P. 393, A]

128*
554*
602*
593*

CATEGORY 11

Male

	F	FB	FS	M	MB	MS	OB	YB	OS	YS	MaC	FeC	So	D	BCh	SCh
F						x										
FB						x										
FS														x		
M						x										
MB						x										
MS										x			x	x	x	
OB																
YB																
OS														x		
YS																
MaC																
FeC																
So																
D																
BCh																
SCh																

Female

	F	FB	FS	M	MB	MS	OB	YB	OS	YS	MaC	FeC	So	D	BCh	SCh
F											x					
FB											x					
FS											x					
M											x					
MB											x					
MS										x	x				x	x
OB											x					
YB											x	x				
OS										x	x				x	x
YS											x	x				
MaC												x	x	x	x	x
FeC															x	x
So																
D																
BCh																
SCh																

?:Freed S-S (1952-1957)1960 NT30 Washo NT30

[P 393, B]

128 *
554 *
602 *
593 *

CATEGORY 14

Male

	F	FB	FS	M	MB	MS	OB	YB	OS	YS	MaC	FeC	So	D	BCh	SCh
F			x							x	x	x	x	x	x	x
FB												x		x	x	x
FS																
M										x		x	x	x	x	x
MB												x		x	x	x
MS										x		x	x	x	x	x
OB												x		x	x	x
YB																
OS												x		x	x	x
YS																
MaC																
FeC																
So																
D																
BCh																
SCh																

Female

	F	FB	FS	M	MB	MS	OB	YB	OS	YS	MaC	FeC	So	D	BCh	SCh
F								x		x				x	x	x
FB																
FS																
M								x		x		x		x	x	x
MB										x					x	x
MS															x	x
OB															x	
YB																
OS										x					x	x
YS																
MaC																
FeC															x	x
So															x	
D																
BCh																
SCh																

7:Freed E-5 (1952-1957)1960 NT20 Washo NT20

[P. 394, A]

128*
554*
602*
593*

CATEGORY 15

Male

	F	FB	FS	M	MB	MS	OB	YB	OS	YS	MaC	FeC	So	D	BCh	SCh
F			x						x							
FB																
FS				x										x		
M						x	x		x							
MB																
MS																
OB																
YB																
OS																
YS																
MaC																
FeC																
So																
D																
BCh																
SCh																

Female

	F	FB	FS	M	MB	MS	OB	YB	OS	YS	MaC	FeC	So	D	BCh	SCh
F		x			x	x										
FB				x									x	x		x
FS													x	x		
M					x	x										
MB													x	x		x
MS													x	x	x	x
OB													x	x		
YB													x	x		
OS													x	x		
YS													x	x		
MaC																
FeC													x	x		
So															x	
D															x	
BCh																
SCh																

T:Freed S-S (1952-1957)1960 NTB0 Washo NTB0

[P.394, B]

CATEGORY 16

128*
554*
602*
593*

Male

	F	FB	FS	M	MB	MS	OB	YB	OS	YS	MaC	FeC	So	D	BCh	SCh
F			x		x	x			x					x		
FB				x									x	x		
FS				x				x		x			x	x		
M					x	x	x		x							
MB													x	x		
MS													x	x		
OB													x	x		
YB													x	x		
OS													x	x		
YS													x	x		
MaC																
FeC																
So															x	x
D															x	x
BCh																
SCh																

Female

	F	FB	FS	M	MB	MS	OB	YB	OS	YS	MaC	FeC	So	D	BCh	SCh
F		x				x										
FB				x			x	x		x			x	x	x	x
FS				x									x	x		
M					x	x			x							
MB													x	x		
MS							x			x			x	x		x
OB													x	x		
YB																
OS													x	x		
YS																
MaC																
FeC																
So																
D																
BCh																
SCh																

[P.395,A]

FREED: CHANGING WASHO KINSHIP

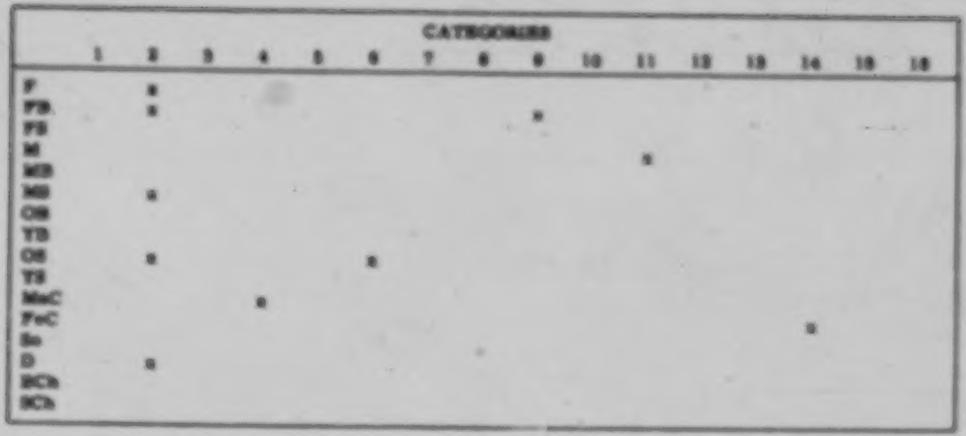
SUMMATION OF CATEGORIES: MALE AND FEMALE

	F	FB	FS	M	MB	MS	OB	YB	OS	YS	MaC	FeC	So	D	BCh	SCh	Total
F		8	11		8	9	3	8	6	10	11	11	9	11	14	14	133
FB			3	13		9	4	6	8	5	6	8	7	11	7	10	99
FS				10		1	2	5	3	4	3	3	9	13	5	9	81
M					10	13	11	11	13	12	14	14	10	13	15	16	185
MB						3		3	4	5	6	6	10	13	10	11	94
MS							1	7	3	9	8	9	13	15	16	13	131
OB								3	1	5	7	8	8	13	13	15	89
YB									4		7	6	3	8	11	8	96
OS										8	11	9	11	13	17	15	125
YS											1	3	3	3	3	1	73
MaC												1	8	6	2	3	63
FeC													8	4	3	3	90
So															8	7	113
D															8	6	133
BCh																	130
SCh																	131

128*
534*
602*
593*

[P. 395, B]

MALE vs. FEMALE



128 *
554 *
602 *
593 *

[P. 396]

128 *
554 *
602 *
593 *

APPENDIX III

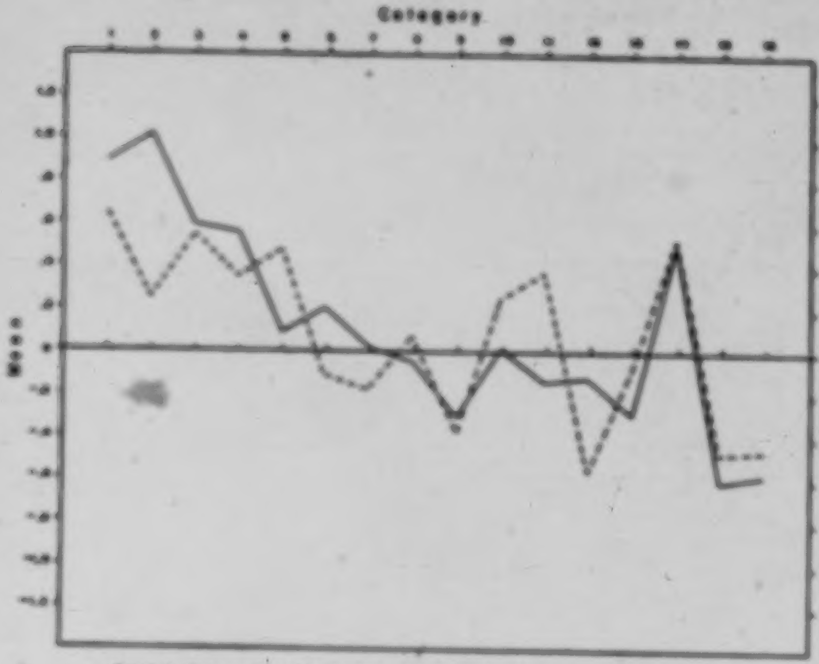
ROLE PROFILES

This appendix contains the graphs of the means of each relative in all the categories of behavior.

P

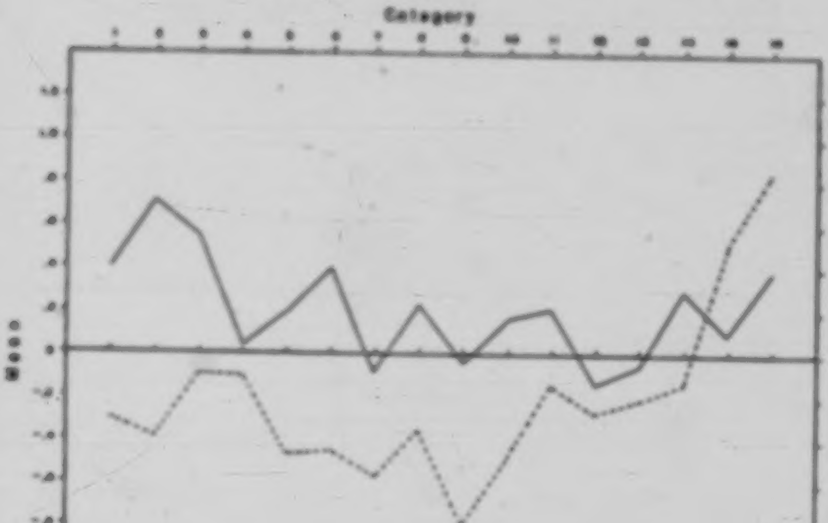
7: Freed E-5 (1952-1957) 1960 NT20 Washo NT28

[P. 397]



128*
554*
602*
593*

Graph 1. Role profile of father for males (solid line) and females (broken line).

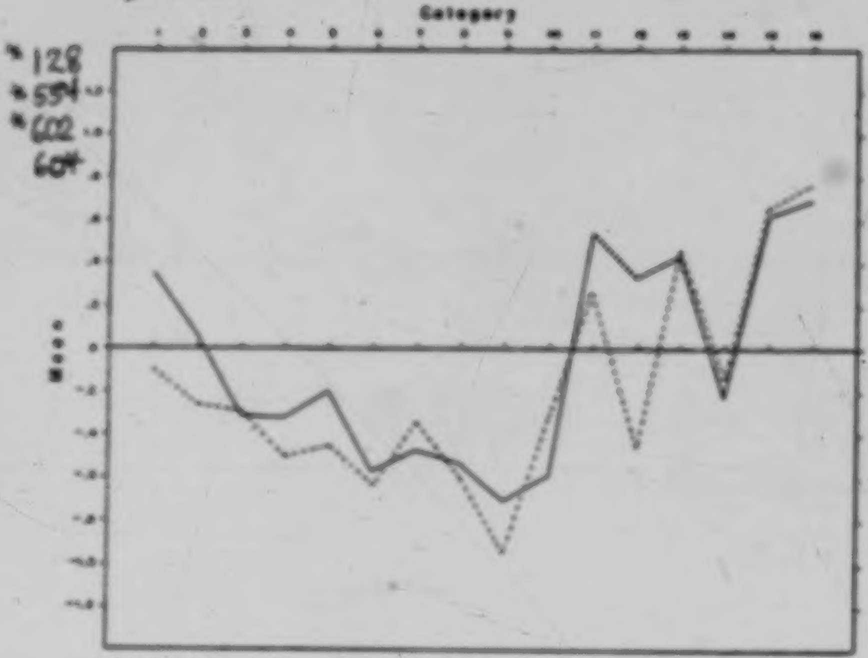


128*
554*
602*
604*

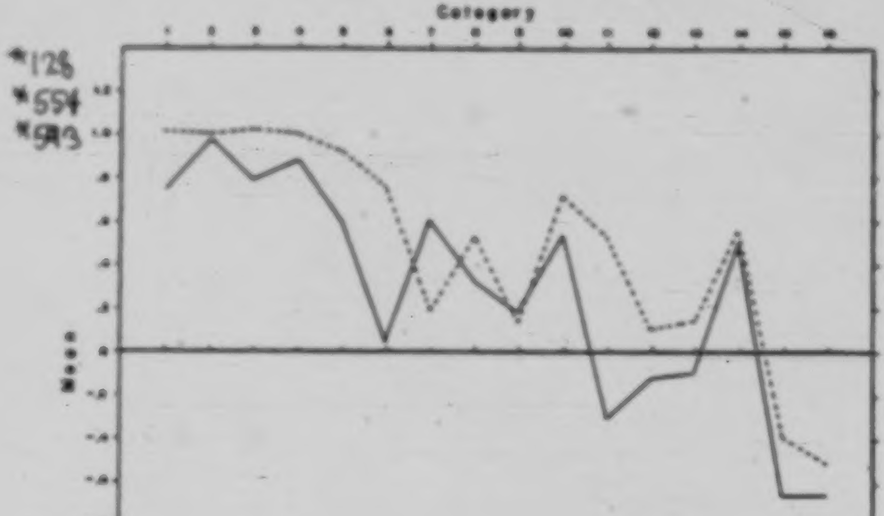
Graph 2. Role profile of father's brother for males (solid line) and females (broken line).

7: Freed E-5 (1952-1957) 1960 . NT20 Washo NT20

[P 398]



Graph 3. Role profile of father's sister for males (solid line) and females (broken line).

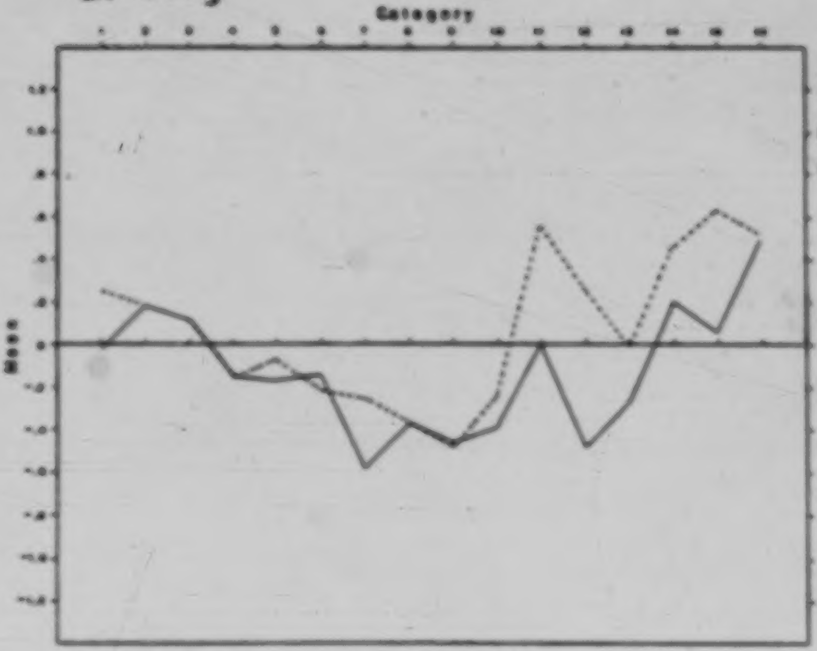


Graph 4. Role profile of mother for males (solid line) and females (broken line).

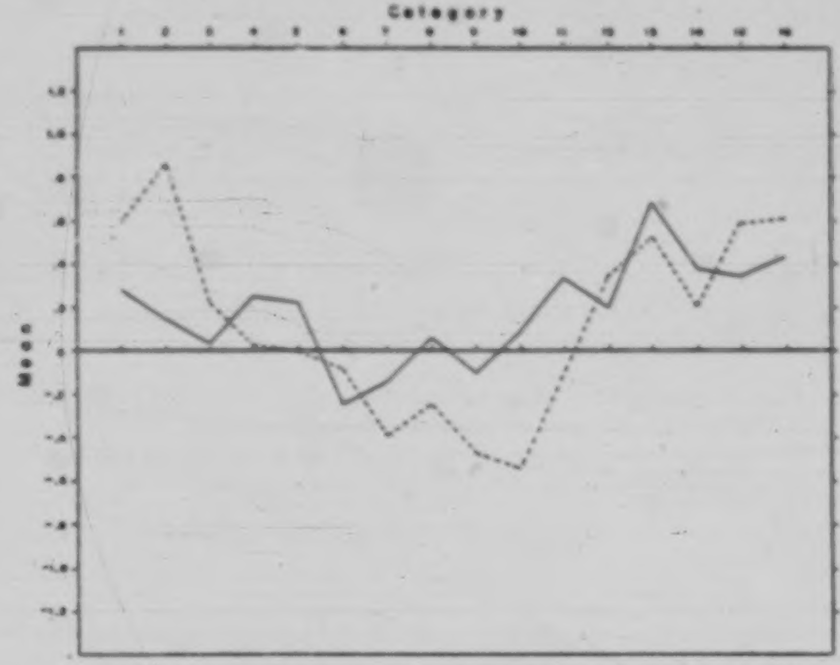
7: Freed E-5 (1952-1957) 1960 NT20 Washo NT20

[P 399]

128*
554*
602*
604

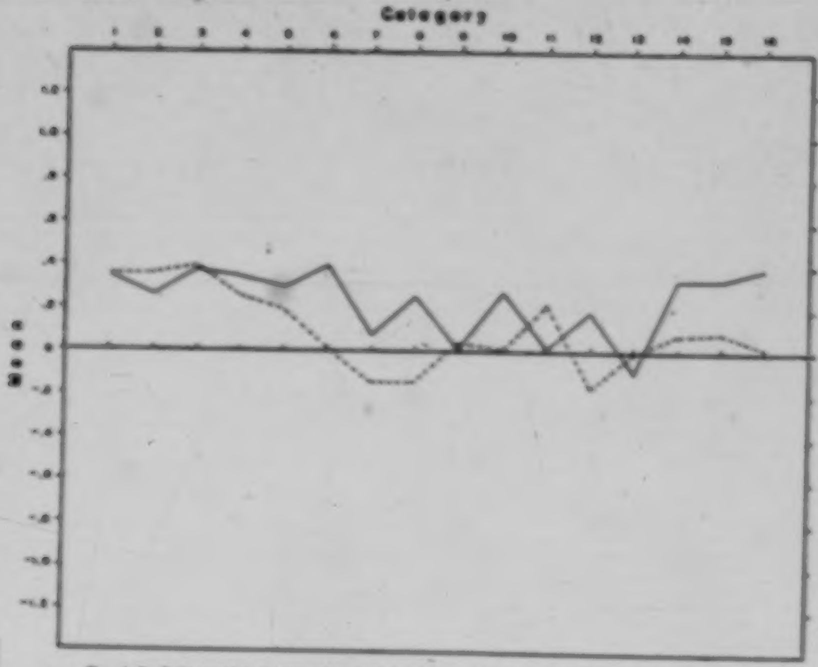


Graph 5. Role profile of mother's brother for males (solid line) and females (broken line).

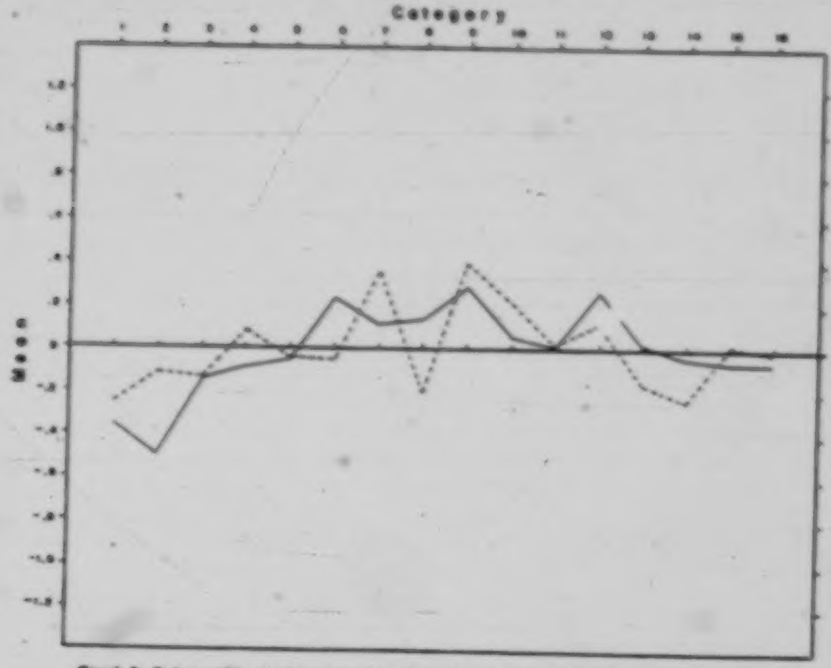


Graph 6. Role profile of mother's sister for males (solid line) and females (broken line).

128*
554*
593*

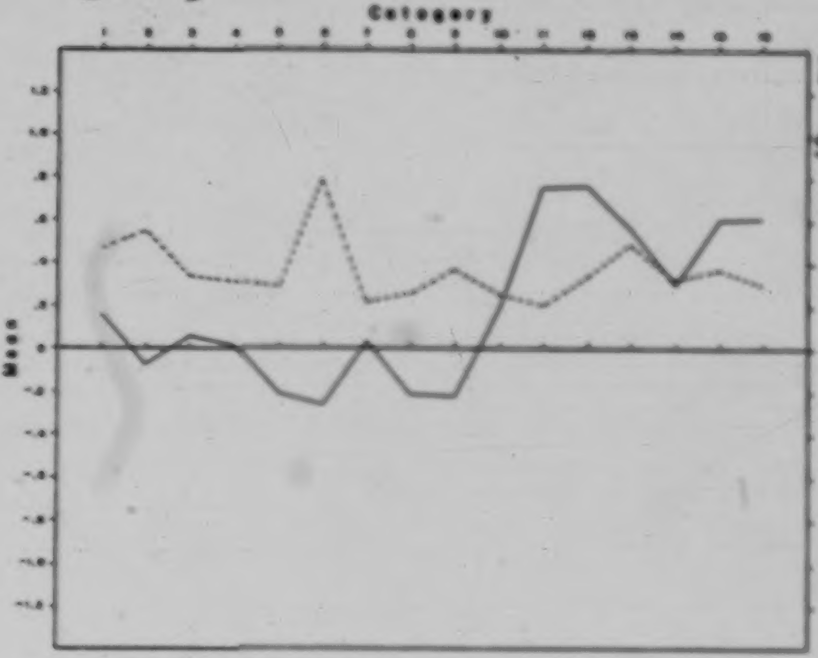


Graph 7. Role profile of older brother for males (solid line) and females (broken line).

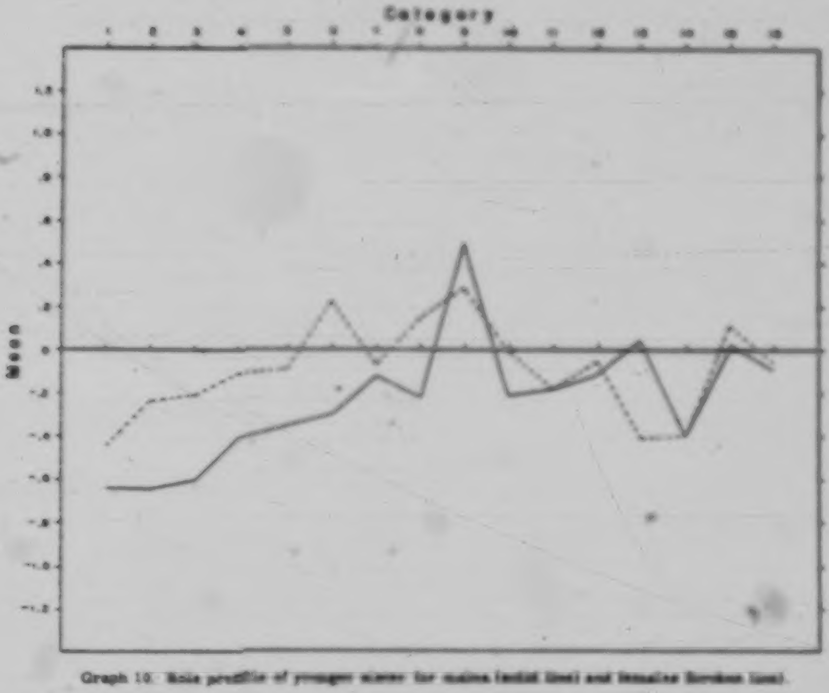


Graph 8. Role profile of younger brother for males (solid line) and females (broken line).

128*
554*
593*



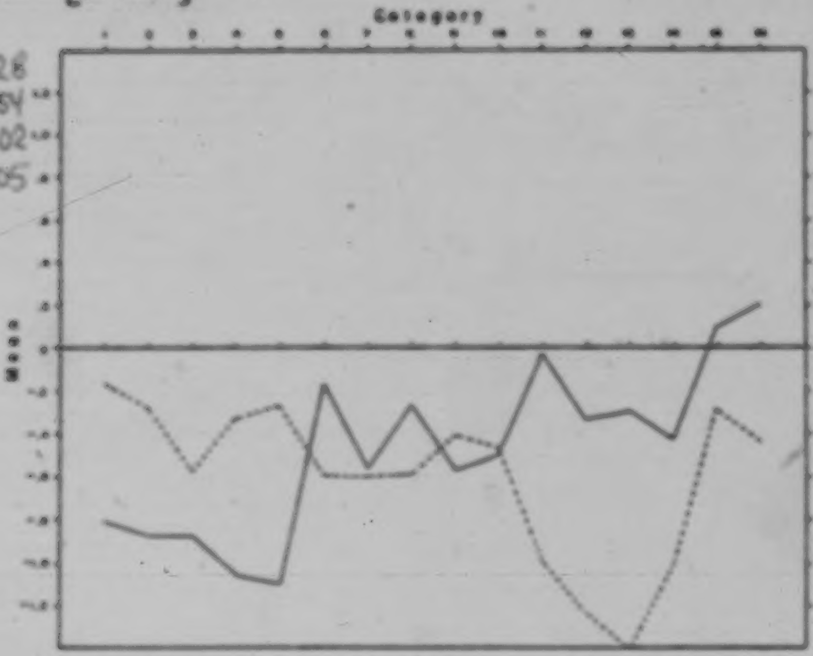
Graph 9. Role profile of older sister for males (solid line) and females (broken line).



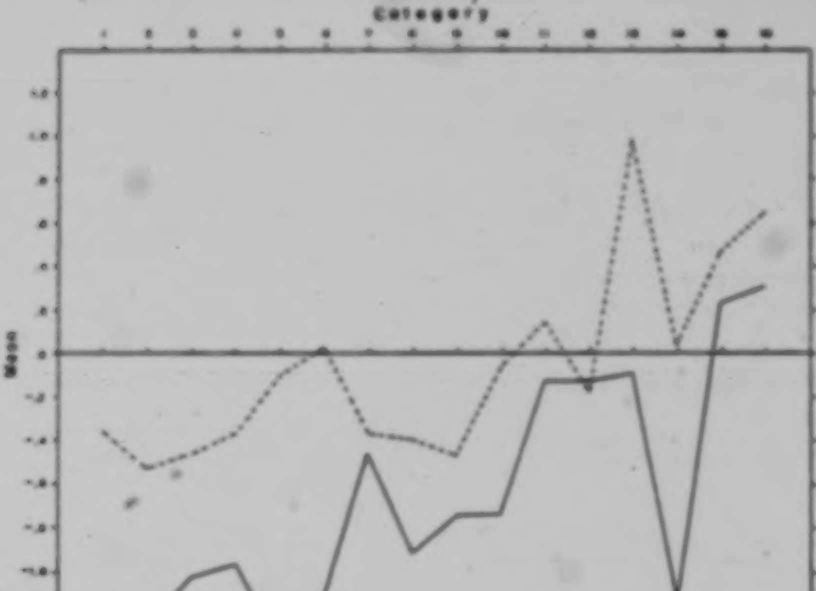
Graph 10. Role profile of younger sister for males (solid line) and females (broken line).

[P 402]

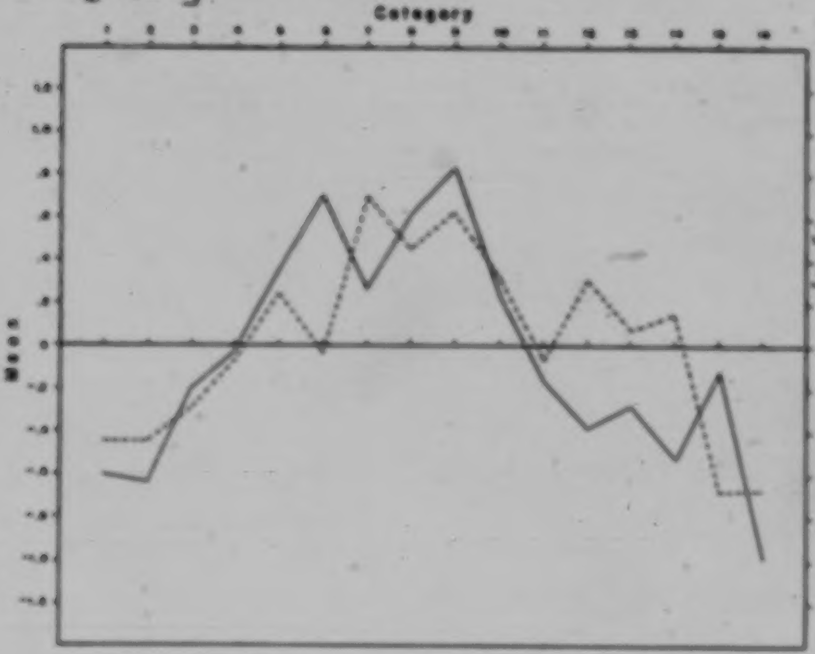
128
554
602
605



Graph 11. Role profile of male counts for males (solid line) and females (broken line).

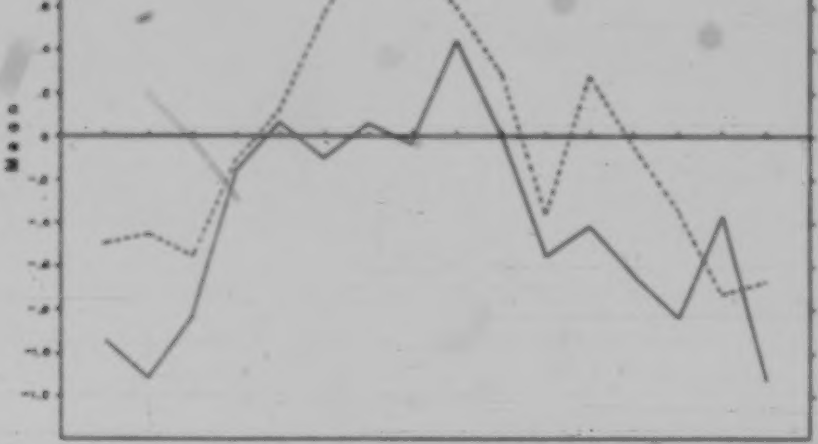


Graph 12. Role profile of female counts for males (solid line) and females (broken line).



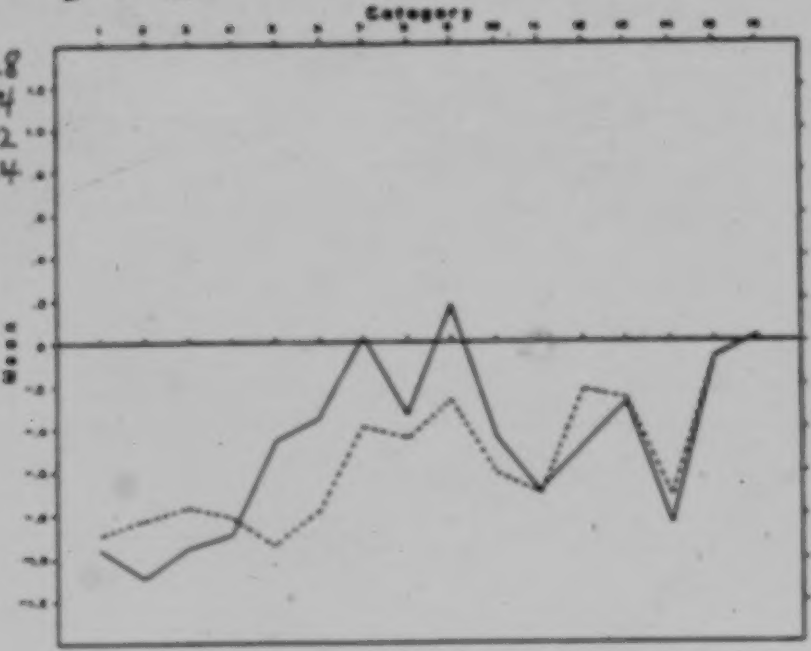
128*
554*
593*

Graph 13. Role profile of son for males (solid line) and females (broken line).

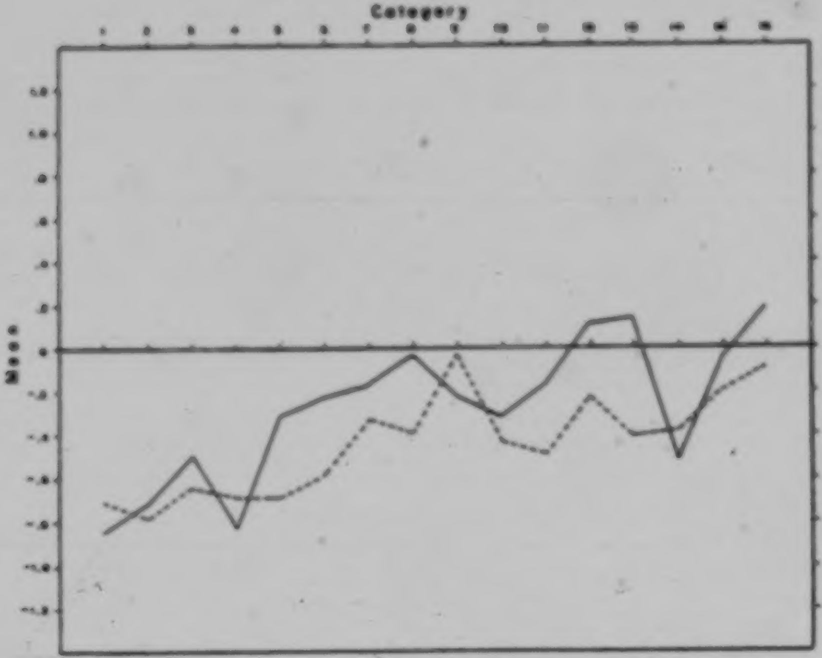


Graph 14. Role profile of daughter for males (solid line) and females (broken line).

M28
*554
*602
604



Graph 13. Role profile of brother's child for males (solid line) and females (broken line).



Graph 14. Role profile of sister's child for males (solid line) and females (broken line).

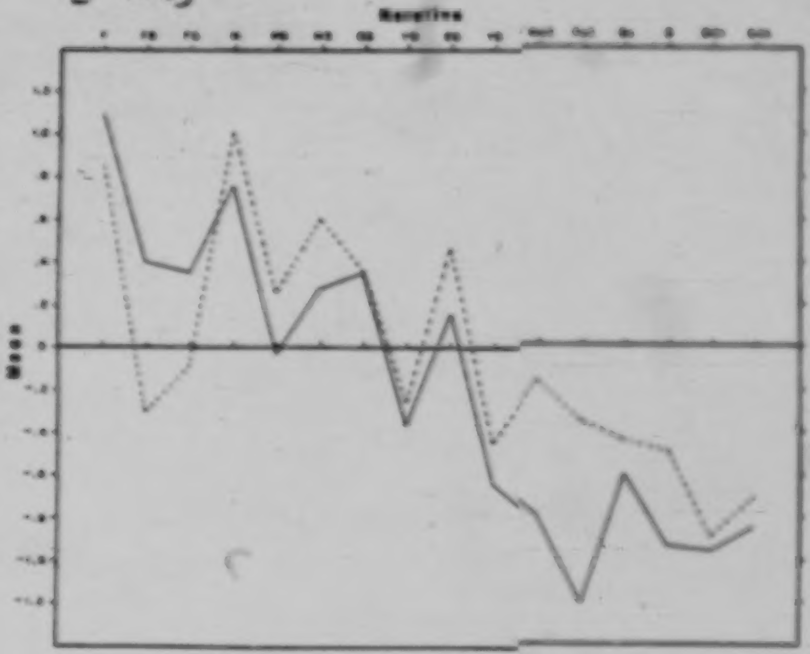
APPENDIX IV

GRAPHS OF THE SIXTEEN CATEGORIES OF ROLE BEHAVIOR

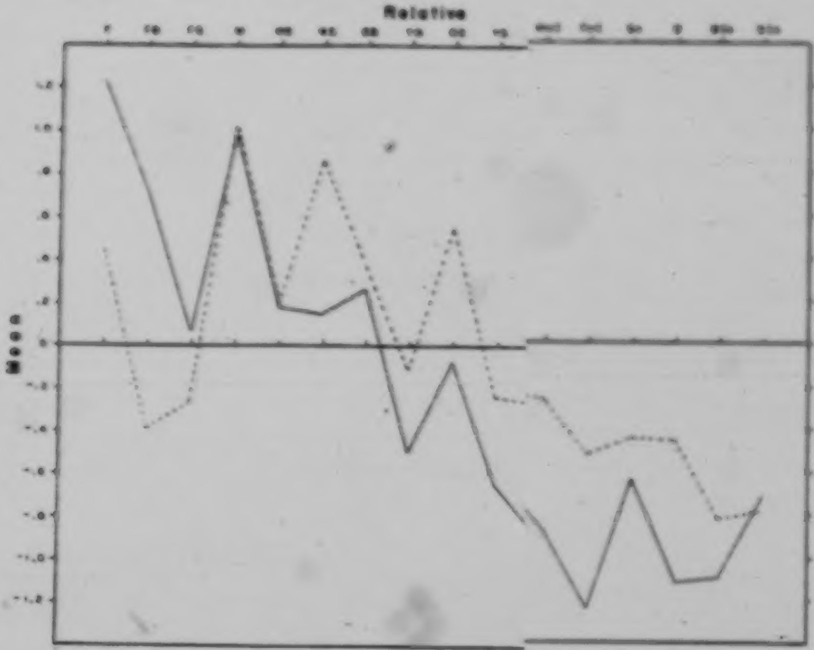
128*
554*
593*
602*

This appendix contains the graphs of each category of role behavior with the relatives on the y axis. The abbreviations are the same as those used in Appendix I.

128*
554*
593*
602*



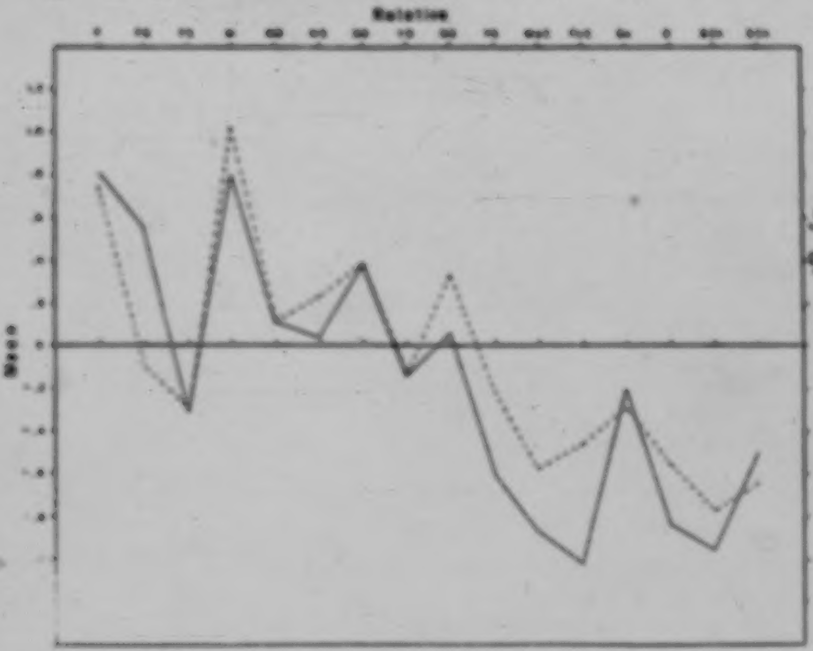
Graph 17. Category 1 (to order) for males (solid line) and females (broken line).



Graph 18. Category 2 (to teach) for males (solid line) and females (broken line).

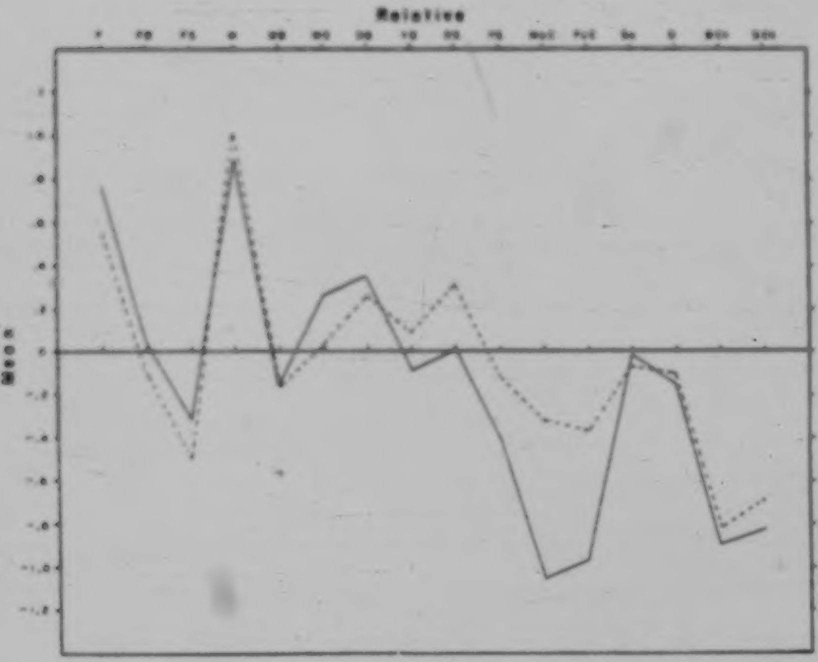
7: Freed E-5 (1952-1957) 1960 NT20 Washo NT20

[P 409]



128 *
554 *
593 *
602 *

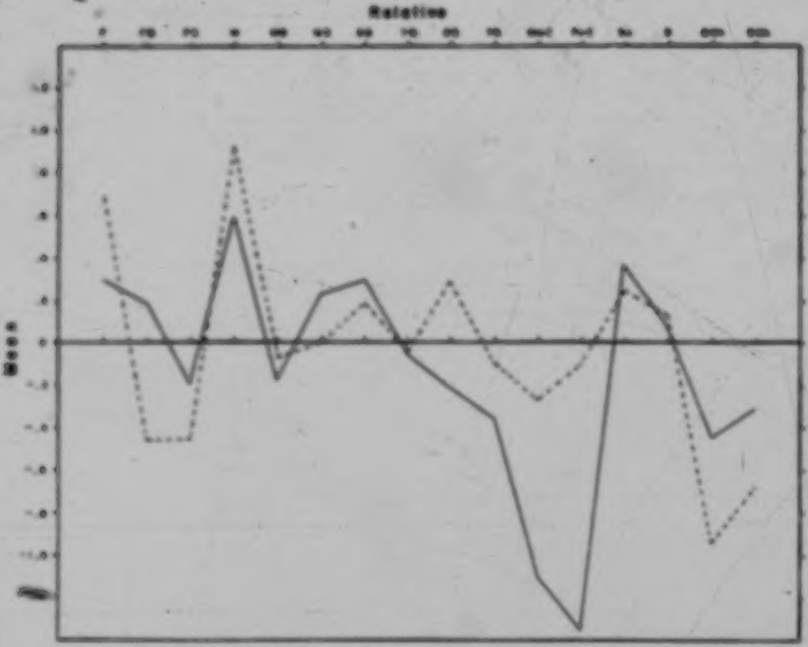
Graph 19. Category 3 (to help) for males (solid line) and females (broken line).



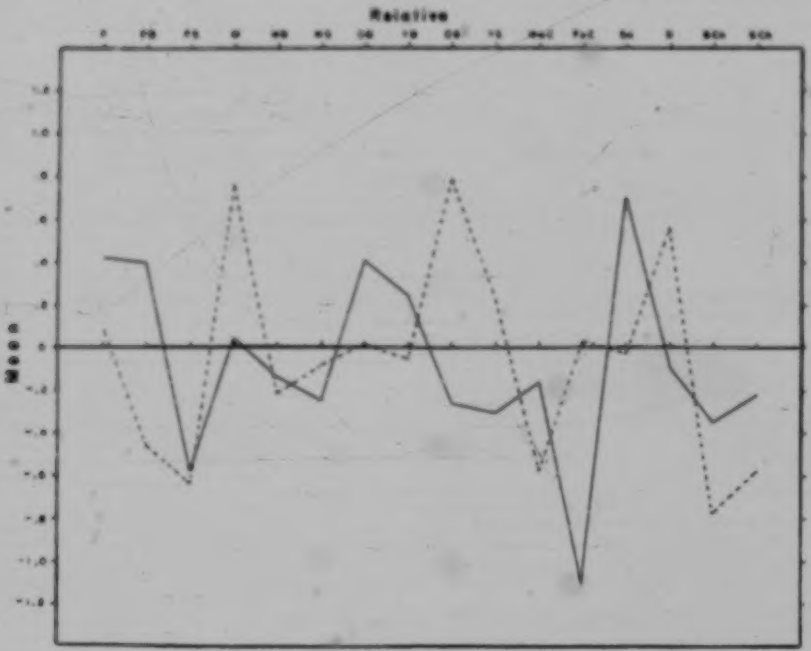
Graph 20. Category 4 (to sympathize) for males (solid line) and females (broken line).

[P 408]

128 *
554 *
602 *
593 *



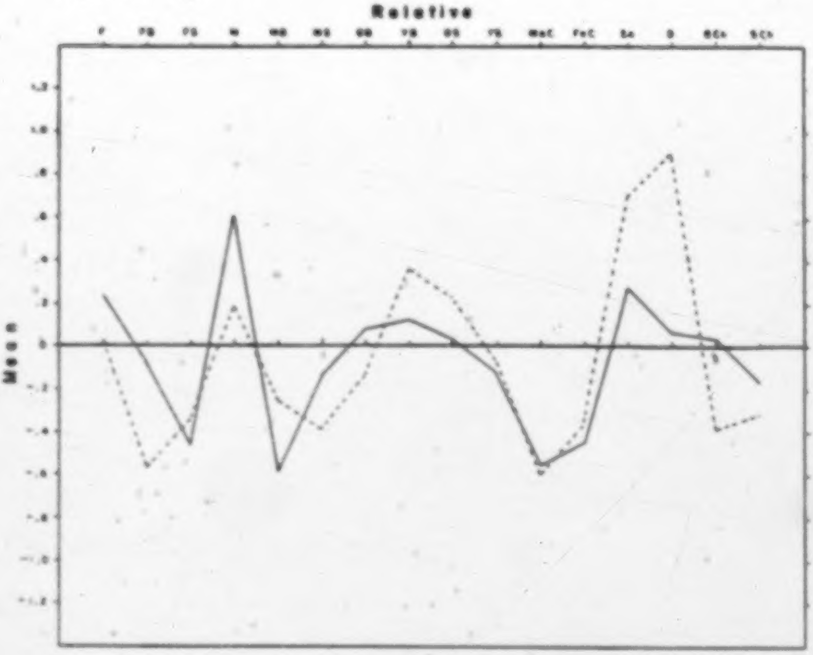
Graph 21. Category 5 (to like) for males (solid line) and females (broken line).



Graph 22. Category 6 (to coöperate) for males (solid line) and females (broken line).

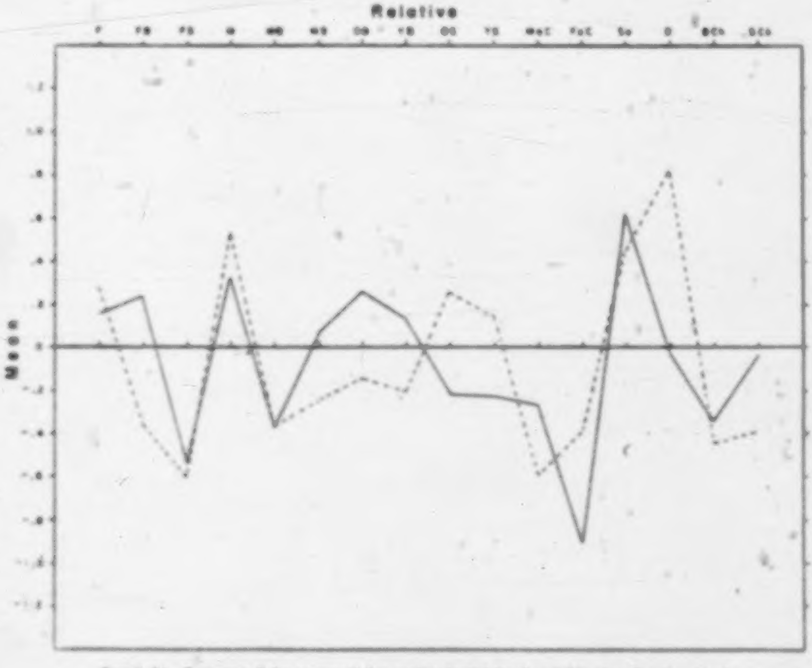
7: Freed E-5 (1952-1957) 1960 **NT20 Washo NT20**

[P 409]



128 *
554 *
602 *
593 *

Graph 23. Category 7 (to depend) for males (solid line) and females (broken line).

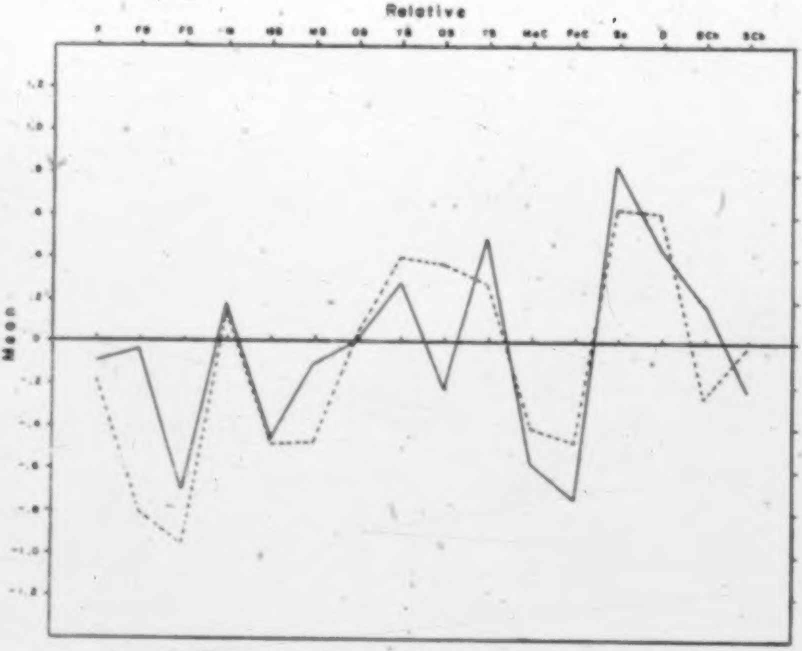


Graph 24. Category 8 (to respect) for males (solid line) and females (broken line).

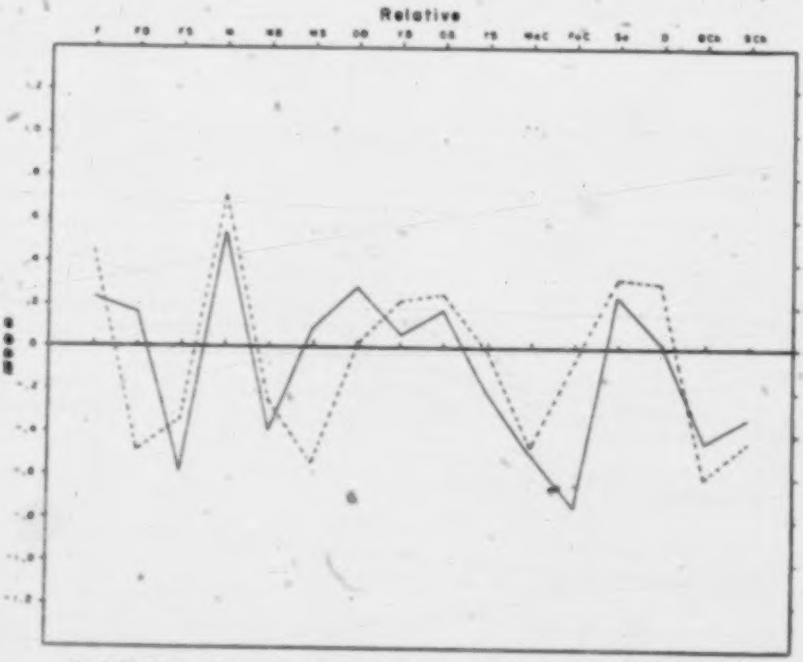
7: Freed E-5 (1952-1957) 1960 NT20 Washo NT20

[P. 410]

128 *
554 *
602 *
593 *

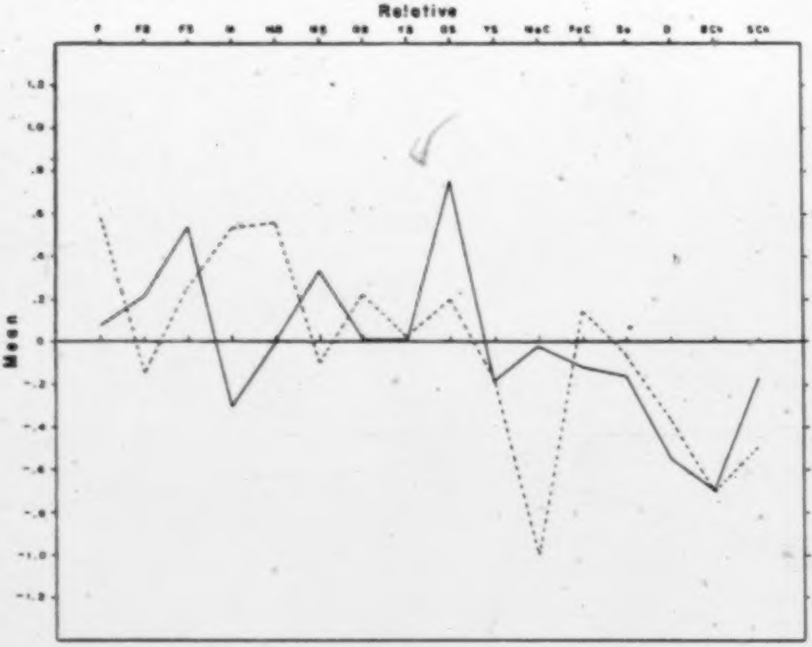


Graph 25. Category 9 (to obey) for males (solid line) and females (broken line).



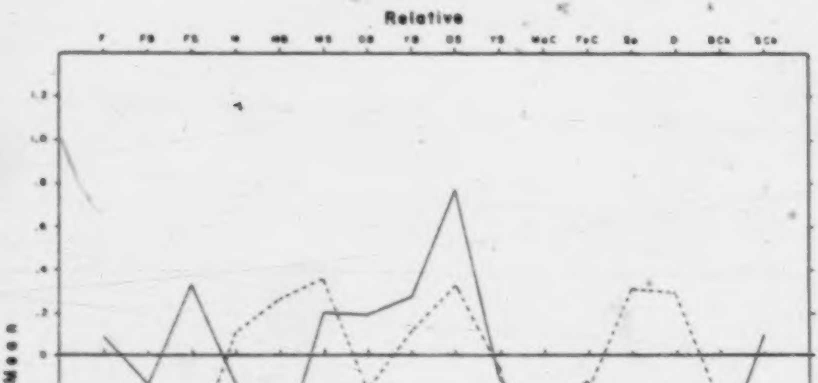
Graph 26. Category 10 (to want approval) for males (solid line) and females (broken line).

[P. 411]



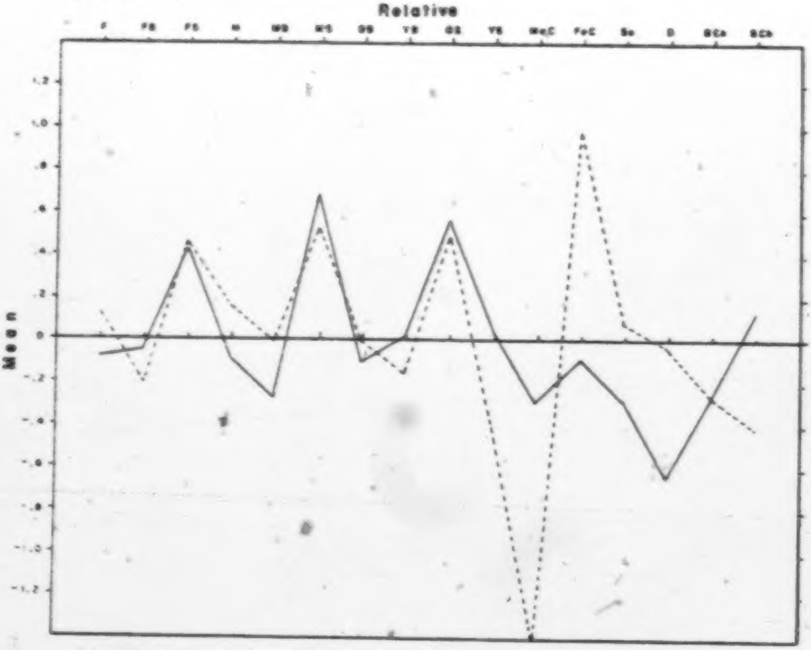
128 *
554 ? -
602 *
593 *

Graph 37. Category 11 (to suspect wrongdoing) for males (solid line) and females (broken line).

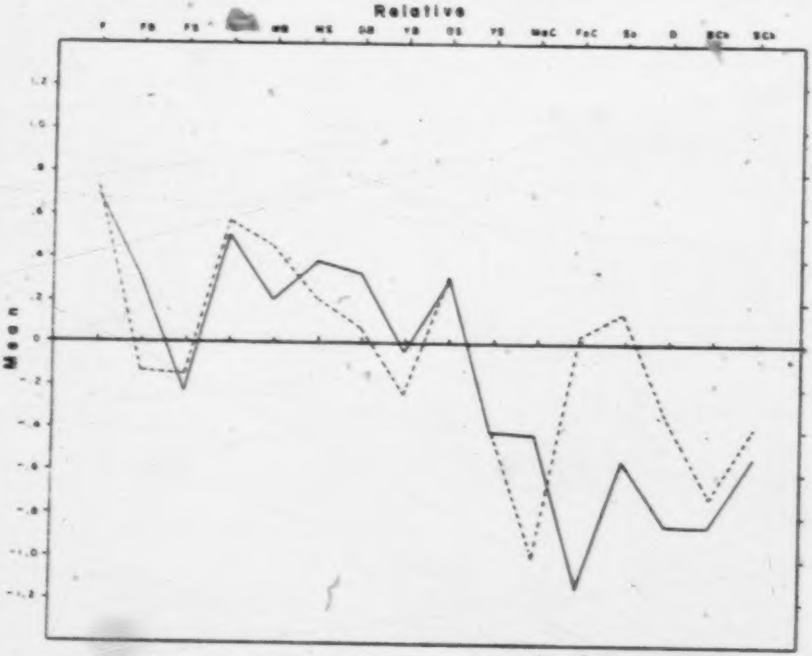


Graph 38. Category 12 (to nag) for males (solid line) and females (broken line).

128*
554*
602*
593*

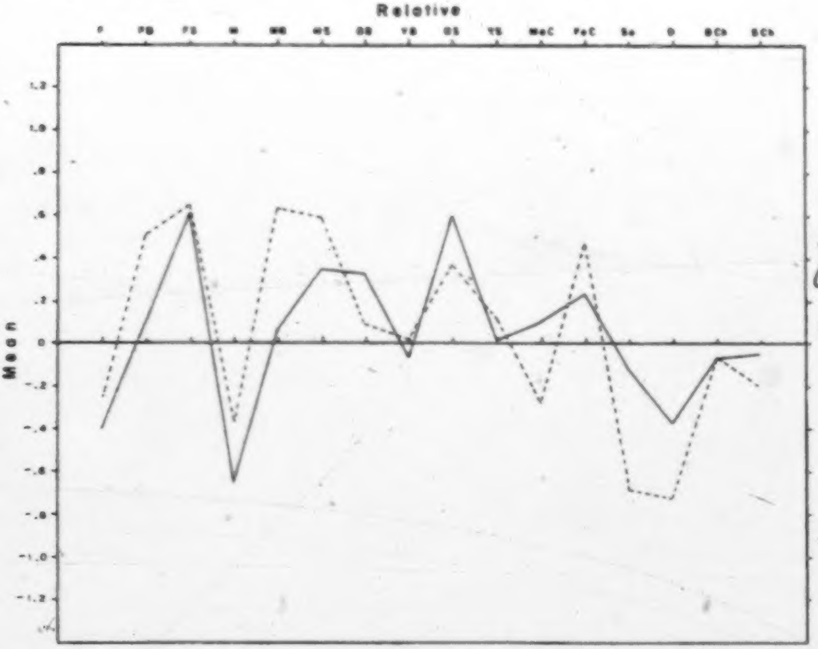


Graph 29. Category 13 (to disapprove) for males (solid line) and females (broken line).



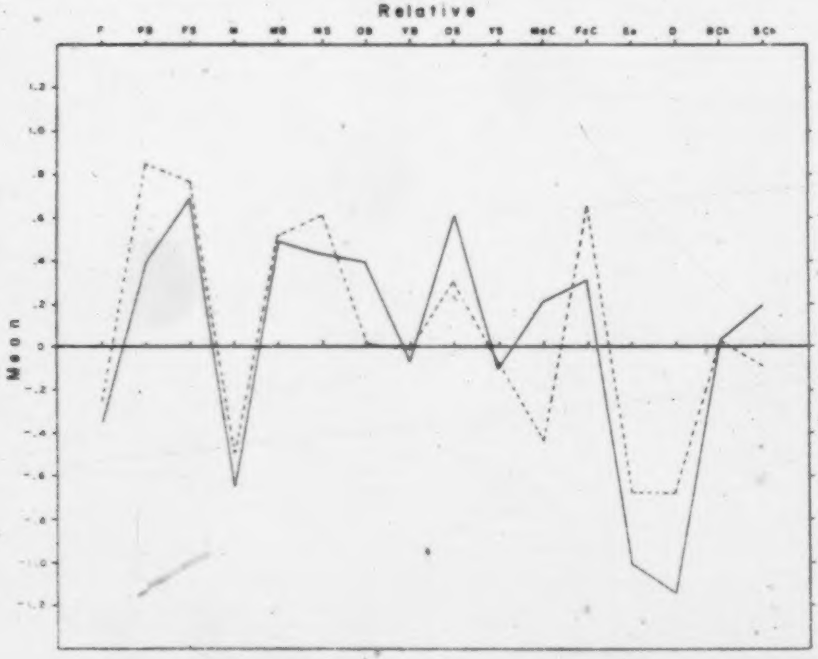
Graph 30. Category 14 (to punish) for males (solid line) and females (broken line).

[P.413]



128*
554*
602*
593*

Graph 31. Category 15 (to refuse help) for males (solid line) and females (broken line).



Graph 32. Category 16 (to reject) for males (solid line) and females (broken line).

BIBLIOGRAPHY 0-80

[P 415]
[P 414 is blank]

[P. 417, A]
[P. 416 is blank]

BIBLIOGRAPHY

Abbreviations

113

AA	American Anthropologist
BAE-B	Bureau of American Ethnology, Bulletin
JRAI	Journal of the Royal Anthropological Institute
FMNH-PAS	Field Museum of Natural History, Publications, Anthropological Series
PMM-B	Public Museum of the City of Milwaukee, Bulletin
SI-MC	Smithsonian Institution, Miscellaneous Collections
SWJA	Southwest Journal of Anthropology
UC	University of California Publications
-PAAE	American Archaeology and Ethnology
-AR	Anthropological Records
UCAS-R	University of California Archaeological Survey, Reports
UW-PA	University of Washington, Publications in Anthropology

[P 419, B]

Barrett, S. A.
1917 The Washo Indians. PMM-B 2:1-52.

Bruner, Edward M.
1955 Two Processes of Change in Mandan-Hidatsa Kinship Terminology. AA 57:840-850.

Caudill, William
1949. Psychological Characteristics of Acculturated Wisconsin Ojibwa Children. AA 51:409-427.

Curtis, E. S.
1926. The North American Indian. Vol. 15. The Plimpton Press. Norwood, Mass.

Dangberg, Grace
1927. Washo Texts. UC-PAAE 22:391-443.

Dole, Gertrude E.
MS. The Development of Patterns of Kinship Nomenclature. Ph. D. diss. Univ. Michigan, Ann Arbor.

Eggan, Fred
1937. Historical Changes in the Choctaw Kinship System. AA 39:34-52.

Firth, Raymond
1951. Elements of Social Organization. Watts and Co., London.

1954. Social Organization and Social Change. JRAI 84:1-20.

Fisher, Ronald A., and Frank Yates
1953. Statistical Tables for Biological, Agricultural, and Medical Research. Oliver and Boyd, Ltd., Edinburgh.

Fortes, Meyer, ed.
1949. Time and Social Structure: an Ashanti Case Study. In Social Structure: Studies Presented to A. R. Radcliffe-Brown. Clarendon Press, Oxford.

[P.417, C]

113

Freedman, M. B., T. F. Leary, A. G. Ossorio, and H. S. Coffey
1951. The Interpersonal Dimension of Personality. Jour. of Personality, 20:143-161.

Goodenough, Ward H.
1956. Residence Rules. SWJA 12:22-37.

Gough, E. K.
1952. Changing Kinship Usages in the Setting of Political and Economic Change Among the Nayars of Malabar. JRAI 82:71-88.

Hallowell, A. I.
1942. Acculturation Processes and Personality Changes as Indicated by the Rorschach Technique. Rorschach Research Exchange, 6:42-50.

Heizer, Robert F., and Albert B. Elsasser
1953. Some Archaeological Sites and Cultures of the Central Sierra Nevada. UCAS-R 21.

Kroeber, A. L.
1907. The Washo Language of East Central California and Nevada. UC-PAAE 4:251-317.

1917. California Kinship Systems. UC-PAAE 12:339-396.

1925. Handbook of the Indians of California. BAE-B 78. Reprinted (1953) by the California Book Co., Ltd., Berkeley, Calif.

Lowie, Robert H.
1928. A Note on Relationship Terminologies. AA 30:263-267.

1939. Ethnographic Notes on the Washo. UC-PAAE 36:301-352.

Merriam, C. Hart
MS. Notes from the files of the late Dr. C. Hart Merriam, at the Smithsonian Institution. Files now at the Anthropology Museum, Univ. Calif. Berkeley, Calif.

[P.418, A]

113

Mooney, James
1928. The Aboriginal Population of America North of Mexico. SI-MC. Vol. 80, no. 7.

Murdock, George P.
1949. Social Structure. The Macmillan Co., New York.

1955. Changing Emphases in Social Structure. SWJA 11:361-370.

Nett, Betty R.
1952. Historical Changes in the Osage Kinship System. SWJA 8:164-181.

Radcliffe-Brown, A. R.
1935. Kinship Terminologies in California. AA 37:530-535.

Sapir, Edward
1916. Terms of Relationship and the Levirate. AA 18:327-337.

1929. Central and North American Languages. Encyclopaedia Britannica (14th ed.), 5:138-141. Reprinted (1949) in Selected Writings of Edward Sapir in Language, Culture, and Personality. David G. Mandelbaum, ed. University of California Press, Berkeley, Calif.

Schmitt, Karl and Iva O.
n.d. Wichita Kinship, Past and Present. University Book Exchange, Norman, Oklahoma.

Schneider, David M., and George C. Homans
1955. Kinship Terminology and the American Kinship System. AA 57:1194-1208.

Schneider, David M., and John M. Roberts
1956. Zuñi Kin Terms. Laboratory of Anthropology. Notebook No. 3, Monograph 1. University of Nebraska. Lincoln, Nebraska.

Simpson, J. H.
1876. Report of Explorations Across the Great Basin of the Territory of Utah for a Direct Wagon-Route from Camp Floyd to Genoa, in Carson Valley, in 1859. Government Printing Office, Washington, D.C.

Siskin, Edgar E.
1938. Washo Territory. AA 40:626-627.

MS. The Impact of the Peyote Cult upon Shamanism among the Washo Indians. Ph.D. diss. (1941). Yale Univ. New Haven, Conn.

Spier, Leslie
1925. The Distribution of Kinship Systems in North America. UW-PA 1:69-88.

Spoehr, Alexander
1947. Changing Kinship Systems. FMNH-PAS 33:151-235.

Stewart, Omer C.
1941. Culture Element Distributions: XIV, Northern Paiute. UC-AR 4:361-446.

1944. Washo-Northern Paiute Peyotism: A Study in Acculturation. UC-PAAE 40:63-142.

7: Freed

NT20 Washo NT20

128

554

602

593 /For the statistical analyses of the results of the role-profile test and their application to the status and role of the individual in the society in relationship to primary and secondary kin relations, see category 116, pp. 372-375, 379(A)--413./

796

/Information on the pine-nut dances and the dances associated with the girls' puberty ceremony will be found in categories 527, 535, and 574./

116

116 TEXTS--a full set of pages from each processed source, arranged in page order, as a means of establishing the context for any particular slip. Sets are arranged in the numerical order of the sources. See also:

Literary texts 539

8: Merriam & d'Azevedo E-4, 5 (1954-1955) 1957
NT20 Washo NT20

AMERICAN ANTHROPOLOGIST

Organ of the
AMERICAN ANTHROPOLOGICAL ASSOCIATION
AND AFFILIATED SOCIETIES

WALTER GOLDSCHMIDT, Editor

Associate Editors

RALPH L. BEALS	WILLIAM A. LESSA
JOSEPH B. BIRDSELL	DAVID M. SCHNEIDER
EMIL W. HAURY	EDWARD H. SPICER

COUNCILL TAYLOR Book Review Editor

BETTY BELL Editorial Assistant

VOLUME 59

Printed in
MENASHA, WISCONSIN, U.S.A.

Published by
AMERICAN ANTHROPOLOGICAL ASSOCIATION

1957

[Title Page]

8: Merriam& d'Azevedo E-4, 5 (1954-1955) 1957
NT20 Washo NT20

Washo Peyote Songs

ALAN P. MERRIAM
Northwestern University
AND
WARREN L. D'AZEVEDO
Northwestern University

I

The Washo

197 THE Washo people of Nevada and California have been described linguis-
tically as a small Hokan-speaking group among the Shoshonean-speaking
15 peoples of the Great Basin (Kroeber 1907; Lowie 1939). They formerly in-
habited a relatively abundant territory extending from Honey Lake in the
north to Antelope Valley and Sonora Pass in the south, and from the Pinenut
Range east of Carson Valley in Nevada to Lake Tahoe and the summit of the
161 Sierra-Nevada Mountains of California in the west. Present population is
variously reported at between 400 and 1000 individuals; the figures on file at
the Nevada Indian Agency in Stewart, Nevada, support the larger estimates.

621 The Washo were formerly distributed in small, band-like communities
[596] composed of semi-exogamous extended families which made use of the full
range of their diversified setting in hunting and gathering, and were thus a
36 highly mobile population. In recent times, however, there has been an increas-
178 ing tendency to cluster in small colonies in or near the older white settlements
62 of Nevada and California, and on the few remaining allotment acres provided
464 by the government many years ago. The major source of money-income for
[434] families is provided by those members who are employed as laborers on
road-construction gangs, ranches, and farms. A few women work as servants
[357] in the towns and resorts. There is little use of the land for agricultural pur-
311 poses, while hunting, fishing, and gathering still provide an important part
433 of subsistence. Despite the often drastic conditions of acculturation during
177 the past one hundred years, the Washo have maintained considerable homo-
178 geneity as an ethnic and cultural minority.

* *The Peyotists*

668 Peyotism among the Washo is scarcely more than twenty years old, having
[177] been introduced by one Ben Lancaster, a member of the tribe who had learned
the ritual and ideology during a long sojourn among eastern and southern tribes.
In 1936 he started the proselyting which resulted in the creation of an enthusiastic group of Washo and Paiute adherents during the period 1936–39. By 1940, however, the movement had already become defunct, and meetings were no longer held in Washo territory. Ben Lancaster continued to preside over the embittered and secretive remnants of the cult, which consisted of a handful of loyal Paiute and a very few Washo members. He also erected an

octagonal "church" near Coleville, California, and was known as "the Peyote 668*
preacher."

The decline of the movement may be attributed to at least three factors: 668*
the aggressiveness and opportunism of Ben Lancaster's leadership, which 578
eventually antagonized the majority of non-Peyotist Washo and encouraged the formation of dissident sects among the Peyotists themselves; the direct threat posed by the new religion to the already weakened influence of the shamans, which united them in concerted and violent attack against it; and the deep schisms effected by the movement in regard to traditional tribal loyalties and family ties, which turned the initial curiosity of the Washo majority to active hostility and rejection. The period of introduction, growth, [114]
and decline of the religion from 1936 to 1939 has been studied intensively by two earlier investigators (Stewart 1944; Siskin 1941).

Recent field work indicates a revival of the Peyotist movement among the 668*
Washo shortly after 1939. Initiated by a relatively obscure Washo member of 178
the cult, who claimed to have learned a "new way" during a visit to Peyotists in Idaho, the sect was labelled "The Tipi Way." It was set in open opposition to Ben Lancaster's domination and succeeded in attracting a number of former adherents from among the Washo who had become inactive after the 1939 debacle. This sect has undergone many changes of leadership since its inception in 1941-42, but it has persisted with remarkable cohesion to the present time. Relations with other members of the tribe have improved to the extent that the Peyotists are now a tolerated and often respected minority, and carry on their activities openly.

When the original proselyter, Ben Lancaster, died in 1955, there were three 668*
distinct sects competing for dominance in the area. One of these was the moribund group referred to as "Lancaster's Way," made up of Washo and Paiute followers who had remained loyal to him. Lancaster's wife and an old Paiute adherent lead the handful of members, and it is known by the latter's name—"J—S——'s Way." A second group is led by a mixed Washo-Paiute individual, and the participants are drawn from his immediate family; it is also referred to as his "Way." However, the largest and most vigorous sect, is "The Tipi Way," which has its center of operations at Woodfords, California, with a substantially Washo membership.

A comparison of the recent total membership of these sects with the participation data presented by Stewart (1944) reveals that there has been a drop from 111 active Peyotists in 1938 to about 78 in 1955. In 1938 there were 37 Washo and 55 Paiute members, while in 1955 fewer than 15 of the active Peyotists are Paiute or of mixed tribal origin. Of the present total membership more than seventy percent attends the meetings of "The Tipi Way" sect.

The members of this dominant sect have initiated and maintained more [794]
contact with the Native American Church than have either of the others. Its members make frequent visits to meetings in Idaho and Utah, and informal delegations make pilgrimages to Peyotist centers in Oklahoma, which they consider to be the homeland of the movement. Every few months "runs" are

8: Merriam& d'Azevedo E-4, 5 (1954-1955) 1957
NT20 Washo NT20

*

668 Every few months "runs" are
276 made by automobile to Texas and New Mexico in order to replenish dwindling
484 supplies of "the herb" from the "Peyote gardens."

*668 Ritual procedure and ideology has undergone some noteworthy changes
since it was first observed by Stewart in 1938. Most of these indicate an alignment
178 with the practices of the Peyotists of eastern tribes as standardized by
[794] the Native American Church. Women no longer preside nor do they sing at
meetings, as they were encouraged to do during Ben Lancaster's early dominance.
* It is now considered preferable to hold meetings in a canvas tipi rather
[533] than in a member's cabin or temporary windbreak. There is insistence upon
members learning "real Peyote songs" rather than bringing "any old song"
to meetings as was once allowed. The performance of leaders in conducting
meetings and in their personal lives is critically evaluated by the membership
in terms of an ideal which is frequently expressed as "the way those old-time
* Peyote Indians back east do it."

668 Some changes are especially significant in that they appear to be unique
178 and to suggest Washo cultural influence. Eagle feathers were formerly used by
237 the shaman and were considered too powerful for ordinary people to handle.
[756] While used in Peyote today, informants admit that the Washo are not as free
with these feathers as are Peyotists in other tribes; the use of eagle feather
"fans" is carefully restricted to the "strongest" roadchiefs and old members.
Other members make fans from the feathers of various birds, each with its
* special qualities and degree of "power."

668 The traditional Washo concept of spirit guidance or power is strenuously
178 opposed by Peyotist ideology. All "power" is in Peyote, and the devout are
778 merely its instruments. Peyote is "good" but the medicines of the old shamans
756 were "bad" because they were the gift from evil forces for the personal gain
of the shaman. This has been one of the primary arguments of the local Peyotists
276 in their struggle to defend and improve their status among the more conservative
members of the tribe. Many Peyotists take the position that the
idea of "power" itself is alien to the true spirit of Peyote, although the same
persons may attribute the eclipse of shamanism over the past twenty years to
the superior "power" of Peyote. More sophisticated versions of this same view
hold that God gave Peyote to man as a weapon to fight evil, and that shamanism
[754] was one of the evils. Individual Peyotists accuse one another of causing
sickness or death under guidance of malicious spirits, or of secretly making use
of Peyotist ritual, song, and medicine as a screen for acquiring personal
[825] advantage in "the old way." Coyote, loon, eagle, and snake are seen at meetings
and are a sign that some member is clandestinely associated with them.

*668 The rivalry among leading Peyotists for success in curing and ritual proficiency
578 is no less intense than that once exhibited by the shamans in public
competitions. Deaths of members or too-frequent failure to cure result in
755 suspicion and the eventual rejection of a leader. Eating of Peyote in large
276 quantities may be admired as a proof of devotion, but it is more likely to be
considered as a slightly unethical swaggering too reminiscent of a trick of the
old shamans who ate the poisonous wild parsnip to show their "power."

755
Though some say that this reveals disrespect for "the medicine," rival Peyotists do boast of their prowess by comparing the number of "buttons" they were able to eat during a single night. 668* 276

The concept of disease also appears to stem from traditional beliefs. Thus it is said that the roadchief, like the earlier shamans, can "look into a person and see what is wrong with him—just like X-ray" (see also Siskin 1941:105). With the aid of Peyote he can track down the disease and remove it with prayers. Disease-objects are often vomited out during meetings and are described as having the form of snakes, insects, stones, etc. The roadchief treats the afflicted part of a sick member by fanning it with smoke or by "switching" it with eagle feathers. Leaders conduct small curing sessions for individual Peyotists and non-Peyotists for a subtly defined fee. There is a tendency to "try" various leading Peyotists during a serious illness, calling on them in rotation to conduct meetings "until the right song or prayer makes a connection."

Other changes also suggest the increased integration of the sect into its Washo setting. English is no longer used in prayers or for the conduct of ritual. If a non-Washo is present, important sections of the proceedings are translated for him by one of the roadchief's assistants. Christian elements have diminished considerably; the Bible is no longer a part of the leader's paraphernalia, and biblical references in prayer or conversation are rare. 668* 178 [191]

II

128

The ethnological data and tape recordings upon which this paper is based were collected by Warren d'Azevedo over a period of nine months among the Washo Peyotists in 1954 and 1955. Alan P. Merriam made the musical analysis and is responsible for the major portion of the final organization and writing of the paper. Recordings were made in the summer of 1954 on a portable Magnecorder loaned by Radio Station KPFA of Berkeley, California. 126 [114] [122]

128

The musical sample consists of five song cycles sung by three Washo members of "The Tipi Way" sect described above. One of the singers was the founder and original roadchief of the sect, and all three have been active participants in the religion since the early years of its introduction by Ben Lancaster. Their songs are therefore fully representative of the type and style current among Washo Peyotists. All five cycles were recorded at a single session in the cabin of a leading sect member in Woodfords, California. The occasion was an "open prayer meeting"—one of the informal social gatherings of Peyotists and their non-Peyotist friends for the purpose of singing practice and religious discussion. 533* 668* 126 114 668*

To "The Tipi Way" Peyotists, singing is a measure of prestige and spiritual eminence. The most admired singers are the most influential Peyotists, and the degree to which a Peyotist has found "the Way" through the "medicine" is demonstrated by his competence with song, drum, and rattle. It is of equal importance to knowledge of the intricate ritual procedure of meetings, and excellence at both are requirements of leadership. A large repertoire of songs is 668* 533* 554

8: Merriam& d'Azevedo E-4, 5 (1954-1955) 1957
NT20 Washo NT20

668
*533 also a measure of the man. One who has been able to "catch" many songs is no doubt "living a good life, and the medicine is backing him."

554 *Instruments and criteria of performance*

534
*668 Musical instruments of the Washo Peyote singers include rattle and drum; the construction and materials used are as important to the musician as the special skills exerted in playing. The most adroit drummer or rattler feels he has done poorly if he is not satisfied with the qualities of his instrument; he is usually most confident if he has made the drum and rattle himself or if they [422] have been made by a Peyotist he admires. Some of the most highly prized rattles are relatively old and have been passed from owner to owner, each of whom knows the history of its ownership.

The four important elements of the rattle are the gourd, stones, tuft, and handle. The gourd should be perfectly pear-shaped and not too large; the older and more used it is, the better, for this toughens and thins the shell which in turn improves the sound. New gourds are often boiled in oil and lined with pine pitch in an effort to speed this desired effect.

Considerable care and ingenuity is exercised in finding materials which will produce the proper sound inside the gourd; the number of "stones" [135] should always be seven. White flint, which is found in the area and which does not break or wear in the gourd, is used by some singers; it is said to give a high-pitched soft rattle. Other musicians use bits of granite, quartz crystal, hollow brass balls from key chains, or small brass nuts (hardware).

The tuft is the "crown" of the rattle and must give a special and pleasing effect while the rattle is being shaken. It is symbolic of the tuft of the Peyote button, and also of sunburst or sunrise, associations which are very important in the appreciation of the general effect of any rattle. Material used is most often hair from a horse tail, but it may also be feathers—the comb of a cock pheasant, or hummingbird wing feathers.

The handle of the rattle is usually intricately carved or beaded, and a fine handle unscrews into two parts so that the rattle can be folded and packed [532] into a small paraphernalia kit. The beadwork or carving symbolizes various aspects of Peyote ideology; for example, bands of color from bottom to top indicate evening, midnight, daybreak, and sunlight, thus concurring with the steps in Peyote ritual. The mounting of the gourd on the handle is considered extremely important; it must be mounted in such a way that the gourd touches the handle only where the pointed end of the latter fits tightly through the tufted top of the gourd. To achieve this ideal, a shell or silver fitting is placed at the bottom of the gourd; this retains the stones but at the same time allows a free space between fitting and gourd. If touching does occur, the rattle "sounds flat."

*
533
534
*668 In performance it is the singer who holds the rattle, and each has some special rhythmic devices of his own which partly identify his playing. Methods of performance, or criteria as to the importance of rattling, are not highly verbalized among the Washo; responses range from, "the rattle is used to keep

time with; that's all," to "it is just as important as the drum and the singing. 668*
Yes it means something; everything we use has a meaning. Right now I don't 534
know the meaning, but it is a symbol." [533]*

The drum used by the Washo in Peyote ritual is usually made from a three-legged iron pot of a type formerly used by miners; these pots are approximately eight to ten inches in diameter and about six inches in depth, including legs
an inch and a half long. The drum is considered a sacred object of great im- [778]
portance to song; thus the ritual of tying the instrument before a meeting or singing practice is carefully observed. The kettle must have been tested for timbre before it is chosen for use; the deerhide must be "Indian cured and tanned," and it is preferable that it not come from a deer which has been shot. At the beginning of the evening, the kettle is filled one half to three quarters full of water; seven pieces of glowing charcoal are added and the hide is then wetted in the water and stretched over the top of the pot. At this point it is the special task of the drumchief to fasten the drumhead by an intricate "star" design of thong or rope fastened from each of the seven pebbles (which should be naturally polished and not "made by machines") placed under the edges of the hide. The tie is referred to as the "star" because its completed design resembles a star shape viewed from the bottom of the pot. The hide is stretched taut in this way and seldom has to be retightened during the evening; it is kept wet by occasional shaking.

The drumstick is usually a carved, highly polished piece of hardwood, and [322]
individual Peyotists like to make and keep their own drumsticks which be- [778]
come potent with the power of drumming and singing after long use. During a meeting, drumsticks sometimes get out of hand and cannot be controlled; drummers say that the stick "drummed by itself," and that they no longer had a sense of holding it.

In performance the drum is ordinarily held between the knees and tipped 668*
slightly away from the player; the drumstick is held lightly between the thumb 533*
and forefinger of the right hand, and the wrist is kept flexible. On occasion, 534
arm and wrist are made rigid so that the drum can be struck with full force; this seems to be reserved for high points in the song when special emphasis is required. The drum is held by the four fingers and "worked" with the thumb of the left hand. The thumb is used for stopping the drumhead; it is pressed firmly over the surface of the hide until just the right pitch and timbre are achieved. Every drummer, during each song and with every drum, has to experiment anew for the right "place." To achieve a particularly "tight" sounding tone, the drummer sometimes lifts the drum to his lips, drinks a bit of water from it, and then blows air through the hide until the pressure from within distends it; bloated drums give an especially hard and desirable sound. Two or more drums are never used at one time.

Questioning about the problem of "good" drumming brings forth a varied response; two typical answers are:

> The drummer is supposed to follow, but he carries the singer. He has to tune the drum according to the singer's pitch. He might have to shake the drum now and then to

> *668 keep the skin wet; this changes the time of his beat. When you wet the skin from inside
> 533 and blow air into the drum, it makes a fuller and deeper sound.
>
> 534 Good drumming is given as a gift. When the medicine gives you the gift to use the drum right, it goes through the body and then you can help. You can't learn in five years; you just keep trying until you learn and it comes to you. If you pray good, the Supreme Master may hear you and will help you to drum good.

The significance of drumming, however, can bring forth a more detailed answer. The following account is a lucid picture of the significance of drumming for a devout Peyotist:

> The drum is the most important. The way the drummer handles himself can help or spoil the singing. The singer depends on the drum, it has to fit his way of singing. If the drummer is good-thinking, or knows his business, he can help the singer; he can make the song real good. The drum and the singing have to be like one sound--all together. A drummer can make the voice move along on waves, he can send the voice where he wants it to go—just like a telegraph—he can put it in that corner or that corner, or send it out a long distance away. A new (inexperienced) drummer drums "too open." (Lets the drum vibrate out of control.) The drummer must keep his thumb down on just the right place to get a full, round sound out of the drum, a deep sound without too much vibration. If you leave it "too open" it gets a dull sound like hitting wood, or it goes wild and sounds tinny. The drummer has to catch the voice of each singer and tune the drum to it. The drummer has to carry the voice, lead it in the way it goes best, and pull the singer through. You have to always remember that the drum is full of electricity, that charcoal and water are inside there churning like a generator each time that stick hits the drum. It builds up big air pressure, and it connects with the air in your throat when you sing. The wrong kind of drumming can make you choke, can push the air back into the singer's lungs and stop his song. I have seen that happen and it has happened to me. Sometimes the wrong drummer will do that to you if he is not feeling right about you. One time one guy was drumming for me and it felt just like his thumb was on my throat trying to choke me. I saw that his thumb on the drum was just like it was choking the drum.
>
> It is hard to say just what is the right way to drum. Everybody drums different. It depends on how the person thinks and feels, and how much experience he has had in the meetings. Drumming changes with every song, and it is never the same twice. It depends on the song and how the drummer and singer are feeling about each other or about themselves. But most of it depends on the drummer. He has to think of himself and the singer, too. He is the main one; he is the helper. That drum is the hardest thing. It takes the longest to know. I am a poor drummer even yet after all these years (about 30). Maybe when I am an old man I will know better. Some of those Indians say the drum is everything, that the drum is the way to the medicine. When you know that, * you know The Way.

668 The problems of what good singing is, and what makes a good singer, are
*533 as indirectly considered by the Washo as are those of instrumental performance. Response is of the following nature:

> It depends on how a man sings with the drumming, how he carries his tune even. He carries it up and holds his voice on the high notes. He has to go up all the way and then carry it down without breaking his time.

668*
533*

A person has to do his best. Sing the song just the way you heard it. It takes a long breath to sing good, to hold all those notes coming down and going up. Sometimes the medicine makes it sound better to you.

Song types

The major distinction drawn between Peyote song types is based upon an arbitrary designation of "main" songs as opposed to "unconnected" songs. The latter are those which may be sung at any time in any company and with any combination of other songs, while the former are sung under much greater restriction. The "main" songs are considered special; they may be reserved for the special opening, midnight, after-midnight, morning, or before-quitting times in an actual Peyote meeting but are always part of a special song cycle. Such songs should be sung in meetings or on an equally solemn occasion, and conversely, it is generally thought improper to sing them outside of meetings; in so doing, one runs the risk of "spoiling" them.

Both types of songs may be sung at specific times in Peyote ceremony. This relegation of songs to certain periods during the meetings seems to have nothing to do with either musical quality or type; rather, it is an arbitrary distinction made by each singer about the songs in his repertoire. It may be that the person who taught the singer the song told him that it was a morning or a before-midnight song, for example, or he may decide this for himself. On the other hand, he may also sing them at any time during the meetings. Various informants revealed different attitudes about this matter, and except for the individual distinction as to the category of songs by a few members, most members sing their songs at any time. The only songs which seem to be required at any particular time are those of the roadchief, who has his own special starting, midnight, and quitting songs.

Songs also are organized into sets or cycles. Such cycles are made up of four songs which are always sung in a particular order, and this gives them a unique quality to most Peyotists. "They are then a set of songs. If he starts one you can be sure the others will follow. They are connected. They are his songs." The songs may be learned at different times and in different places, and then put together in certain order by the singer, or a set may be made up of four versions or four repetitions of the same song; examples of each are included in the present study. A partial explanation for this difference in rendition seems to be indicated by historical evidence. It has been reported that fifteen years ago very few Washo sang at all, for most of the old songs were forgotten and no new ones had been learned. Ben Lancaster, the original proselytizer, had learned a few songs in Oklahoma and from the Gosiute, and these he taught to his members. At the same time he encouraged people to sing any songs they knew at the meetings—gospel songs, traditional Washo songs, popular American songs (cowboy, hillbilly), or songs of other tribes that they might have learned (Stewart 1944). Apparently because most individuals knew only a song or two at most, it became the custom to repeat the same song four times in the cycle rather than to sing four different songs.

[177]

*668 *533 [578] [178] [554] Along with the schisms which have developed in the cult during the breakaway from the Lancaster tradition during the past fifteen years, there is now an emphasis in the Tipi Way faction of the cult on knowing many songs and having different songs arranged into four-song cycles. The arrangement is usually an individual matter, and a person who has learned twelve to twenty-four songs and arranged three or six cycles is considered a very accomplished Peyotist.

However, among those who have remained in Lancaster's original group, the singing of one song through a cycle has become traditional; thus if a man knows ten songs he has material for ten cycles. Individuals in this group have learned as many new songs as have the Tipi Way people, but place a traditional ritualistic importance on singing a single song per cycle. "If you got a good song," they say, "it is your song and it is part of you. Maybe that song is the best one for you." On the other hand, Tipi Way people express the opinion that "it is boring to hear a man repeat the song so many times."

* *Sources of songs*

668 *533 177 There are apparently two major sources of Peyote songs for the Washo—other people, and on-the-spot inspiration; the former seems to be far the more frequent. Of eighteen songs in the present collection for which the origin is fairly well documented, seventeen were learned from other people. Of these, three were learned from Sound Chief records (1 Cheyenne and 2 Kiowa songs), and fourteen directly from other Peyotists in the period from 1939 to 1947. The listing shows 3 Bannock, 3 Shoshone, 2 Paiute and 1 Klamath ("they sound like any other Peyote song") songs, and five songs which were "learned in Idaho." The singers seem to be least sure of the songs learned by listening to records. Of the others, the individual learns the song from some leader, friend, or even from a stranger at certain meetings in which he has achieved the degree of involvement necessary to absorb the song "all at once," or "so that it just came into my head." *

668 *533 176 The songs made up by individuals seem also to involve dramatic learnings; the singers say that when one "catches a song" it is learned all at once in a moment of great emotional intensity. Of the single song created by a known individual, the composer commented that it was a song that "just came to me" at a Tipi Way meeting. "I never heard anyone else sing it. Maybe I might have heard it someplace a long time before that, and the meeting helped me to catch it—that happens sometimes. I always sing that song the same way; don't change it none."

Most songs seem to have been embellished, consciously or unconsciously altered over time, combined, improvised, forgotten and "caught" again in new form as one's own. The last are thought of as "new" or "my" songs, but the singer has no inclination to hide the fact that he was influenced by another song, and that "I just changed it a little." Nevertheless, it does become a "new" song.

The following illustrates one of the rare instances of known individual creation, and also gives some indication of the process of variation: 668*

> When I was a child in Carson Valley I used to go out in the fields at night during a 533* thunder storm to listen. Lightning and thunder had a special fascination for me, and 176 I still dream about it. I remember how the sound of thunder seemed to strike against [773] Job's Peak and then glance off and go rolling northward like the sounds which had followed and swallowed up "the old lady and the old man" (mythological creatures in the Washo creation tale). While the thunder was rolling away I could hear him singing a song; his voice was that sound thunder makes when it echoes among the mountains. I can remember that song, and I can sing it. I have sung it ever since I was a child. It is my song. The words went *li wa . . . li wa na*. That *li* sound was a kind of white man's language sound, kind of hard and rolling along . . . *li wan*.

Later, when the informant began to attend Peyote meetings, he started by singing this song, but in time he changed the "words" a bit to sound like *han a wan*. He did this to make it sound more like "Peyote song words." He was [821] not sure that the original sounds were appropriate because they were filled with his earlier fears as well as his feeling that thunder and lightning were his [778] "power." Peyote forces one to put these earlier powers aside and trust in Peyote. As time went on, he began to change the song slightly to include parts of other songs that struck him as similar to his. He heard one song from a [177] member in Idaho which fitted into his own song. "But it is really my own song and pretty much the way I used to sing it when I was a kid; the way it moves and the words still remind me of the way thunder sounds when it echoes and bounces along the valley."

Variation, effect of recorder, and rivalry

It is difficult to ascertain many clear-cut patterns with respect to allowable 668* variation in Washo Peyote songs. The range varies from a frank admission of 533* improvisation during the course of the song, to saying about a "main" song that "It can't be changed in any way or it is wrong. You learn it that way and you keep it that way." It appears that, ideally at least, "main" songs are never changed; apparently other songs may be varied to the point of becoming "new." Under normal circumstances, the singer seems to try to keep the original version fairly well in mind—"I try to sing it the same way," or "If you can, you keep the song like you heard it"—but on the other hand, "I can't quite get it just the same," and "it is all right to change it some time." There is also a clear recognition of changing songs, expressed in such statements as:

> I made lots of changes, but I don't know exactly what they are now. I put some of my own sounds in and changed the tune a little. You can do that if you feel like it.

> I tried to keep the old words as much as possible, but I couldn't understand them anyway, so little by little I stuck in some sounds from my own language that seemed good.

At the same time, "it is important to keep the rhythm as much the same as you can; that's a special part of the song."

In the fifth cycle the singer sang five songs; when questioned he averred that "it doesn't make any difference outside the meetings," but he was more

668 *533 than sheepish about it. The mistake was ritualistic rather than musical alone, and from this standpoint it seemed to make a great deal of difference; it was clearly a mistake and it was commented upon by others as indicating a lack of attention, or flippancy, or worse, depending upon what the listener felt about the singer.

*126 668 *533 It is at least possible that the singer's mistake in this case was brought about by nervousness. The person involved had been the victim of a faulty tape recorder—the tape was blank after his first rendition of songs, and this threw him into a state of terrified depression which was only partially relieved when the songs came out perfectly on second try. Other evidences of nervousness appeared in jocular or serious remarks addressed to or about the machine —a mistake was made "maybe because I was lazy or worried about that tape recorder."

*, *668 533 578 154 [126] Any errors made were exploited by rival musicians. In the case noted above, the singer's chief rival remarked: "Maybe that machine don't want your songs; maybe the medicine won't let those songs get taken down." In the cases of two leading singers who drummed for each other, both remarked semi-privately that it had been difficult to sing because of the poor drumming—"X was hitting all over the place. It threw me off and I made a lot of mistakes"; "Y had his thumb wrong; the sound was too open"; "I had a hard time keeping up with him; he was getting ahead of me all the time." Such rivalry is sometimes verbalized directly—"maybe he was trying to mess up my singing" —and in general it seems to be one of the means by which hostility is expressed among Peyotists. It is expected that one person expresses his feelings about another by the way he either "helps" or "holds him back" in singing.

Values

183 *668 There are some values in respect to Washo Peyote music which may be directly listed; they are those most frequently and clearly verbalized.

*533
1. The most important thing about a song is that it is like a prayer. It has a unity and power of its own which cannot be "broke into parts."
2. Songs are gifts of Peyote and should be taken for what they are, rather than being talked about and analyzed.
3. Singing a song at the wrong time, or talking about it, may spoil it so that it loses its power.
4. Certain songs are to be admired for their intricacy, and the singer who can learn them is also admired.

On a somewhat different plane are other values, which are expressed as:

1. There is a certain length of time a song should be sung to feel right; it has to build up a certain amount of emotion and concentration in the singer and the listener.
2. "He drags the song out a little too long, like he don't want to let go of it. You can waste a song that way."
3. "He liked that song, I guess. He sang it good and he feels good. You can tell that.

> He was *in* that song and it made a connection—took him down the road. You can tell he liked the gourd and drum, too. They really keep him going." 668* 533*
>
> 4. "He has that real Indian sound in his voice—like the old-time Indians." [183]

There is little real response to questions dealing, for example, with the difference between good and bad songs; it is evident that "good" and "bad" take the musician immediately to the texts rather than to music analysis—"No, it all depends on the wording, but we don't know the wording of the other tribes' language so we have to trust that it is a good song"; "Just the sound might sound better in some song, but it don't mean any better as long as the man singing is a good man. There are no bad songs unless a man is thinking bad."

It seems clear that a song is judged not so much for or by itself as it is in terms of a total situation. No informant speaks of technique or structure; any special effect of technical finesse is seen as a whole, that is, as a total reaction of the commentator to the personality, association, and potency of the performer as well as to his equipment the perfection of his rattle, and whether he was in good voice. Songs are not things in themselves but are vehicles 668* through which religious emotions and concepts are expressed. They are some- 533* thing that has to be dreamed, heard in the mind's ear, performed; and the 182 concept of "song" abstracted from "performance" is not present. The singer 781 himself is caught in the totality of the performance; it is a religious and emotional experience for him—he may "take a trip when he sings," and he never just "sings a song." "When I'm singing," said Z, "I'm praying in the Tipi and going on the journey over that road."

III

Vocal style

McAllester (1949:65-6) has noted a special Peyote vocal technique which 668* corresponds best to Herzog's Type B. "In general the Peyote songs are sung in 533* a rather simple vocal style. There is usually somewhat greater tension on the vocal chords than is used by Europeans, there is somewhat greater use of accents and grace notes, and there are occasional pulsations on certain notes, particularly if they are quarter notes or longer. But the high degree of tension, the quavers, breaks, shakes and shouts of Type A American Indian singing are, often, much reduced or quite absent" (p. 65). These conclusions fit the Washo Peyote vocal style almost perfectly.

There is, however, one special vocal effect called a "shaking sound"; the ability to produce it is considered to be the mark of an excellent singer. At the same time, according to one informant, "That shaking sound you hear sometimes in the Tipi is the medicine working, not just the man does that; the medicine and good thoughts do that." The sound referred to is a particularly vibrant quality to the voice which gives the impression that many voices are singing at once in a slightly disharmonic, vibrating manner. Within the tipi the effect is quite dramatic; the tipi seems to be shuddering and at moments the tent poles appear to be shaking against a strong wind. Singing of this sort is

*
668
*553

usually thought of as the high point of the meeting when it occurs, and it elicits a stir of excitement; the men discuss the technique and point to their throats to indicate where and how the singer must be making the sound. A common phrase heard in this connection is that "he made the tent poles wobble," and "he made a connection there."

The exact nature of the shaking sound is not known to the authors; it seems to be a combination of effects—first, a special "ventriloquistic" effect common in American Indian singing and in contrast to the normal Washo Peyote vocal technique; and second, a reverberation sound echo set up in the tipi or cabin due to a combination of singing, drumming, and rattling operating in a certain acoustic situation. It may also be induced by a high-pitched whining or humming on the part of others in the room; this is formalized and given the name "helping the singer along." In any case, the effect is real to the degree that it is heard distinctly in recordings; it has an apparent religious significance in that it indicates the "medicine is working."

Song texts

Song texts are made up almost exclusively of meaningless syllables with a very few words in English providing the only exception. Some apparently typical syllabic configurations may be noted as: *yo wa no hay nay; / no wa nay o na.* In some cases syllables beginning with k, w, and l are used, but these are relatively infrequent.

[171] Nettl (1953:161) has noted that in the Peyote songs of the Arapaho there is a definite repetition of syllables when melodic rhythms are repeated; that is, not only when the same line is repeated but when the line is varied in the same rhythm. This is also characteristic of the Washo songs. Nettl further reports the existence of "an almost universal . . . closing formula . . . which is sung on four long notes, or three long and one short note on the tonic" (1953:162). To a certain degree, this pattern is found in the Washo songs, but it is by no means "almost universal"; twelve of the 21 songs show the characteristic clearly, the remaining nine either vaguely or not at all.

Finally, Nettl notes that in closing, "the vowels of the first and second syllables are identical; they are usually higher than, or identical with, the fourth vowel. The first, second, and fourth vowels are front vowels, the third is a back vowel" (ibid: 162). Again, this is a pattern found frequently though not exclusively in the Washo songs. The most frequent closing pattern in those songs in which four final tones are used is *hay nay yo wa*, found in seven songs. In four other songs, the closing pattern is *hay nay yo way*, an obvious corollary. These patterns correspond closely to those reported by Nettl (1953:162) and McAllester (1949:68). Some other patterns include *hay yo wa nay; / hay ya no; / hay no hay ya ha; / hi ya ya no.*

The Washo themselves, of course, note that the syllables are meaningless and they speak of them as "words of another tribe's language"; at the same time, they admit that they sometimes make up their own meaningless words. One informant said that he would use Washo words except that "serious words in Washo are too long and don't fit the time of the songs." Another reported

that some sounds have a "happy sound," others a "sad and serious sound," 668*
but he was unable to give examples of what was meant. 533*

It is worthwhile to cite the words of two other informants in this connection. Informant X noted:

> The Shoshone and Paiute use their own words. The Washo language is too slow . . . and words that have the right meaning are too long. The only meaning is in the other language, but I don't know the meaning. I only know my own feelings. We just sing the songs as a tune.

Informant Y reported:

> The words got a meaning, but not like ordinary words. We sing different songs for different times. We start out with certain songs before midnight and other songs later. . . . That's the way I was told about them. Each song represents some things . . . like a sick person sings to feel good. The words mean something in another Indian language. Sometimes we put Washo words in. It is pretty good to put your own words in; then you know what you are saying. But I follow the song just as I learned it, because the Washo didn't have that way of worshipping.

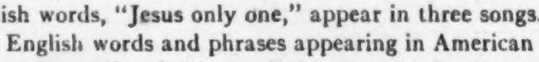
The English words, "Jesus only one," appear in three songs. It is not unusual to find English words and phrases appearing in American Indian songs, but they are not usually of this particular context. In connection with the song, the singer noted that the words were "a necessary part of the song. They are always sung with it," while another informant reported that the English words are put in the songs "for the benefit of people who don't speak the language of the song. That's so they can understand something."

In general, the Washo texts seem to conform to the overall Peyote style.

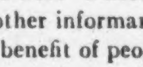
Instrumental accompaniment

All songs are accompanied by the rattle shaken by the singer, and the 668*
drum played by a second musician. There is no other instrumental or vocal 533*
accompaniment. 539

The rhythmic patterns used by the drummer are almost totally unvaried—the standard beat is a steady evenly-spaced series of eighth notes. The rattle, on the other hand, is played in a considerable variety of patterns ranging from a simple succession of quarter or eighth notes to such configurations as:



Of special note is a pattern in which the rattle player establishes a beat which can only be classified as "hot":



while the "hot" beat is admittedly a somewhat vague concept from the analytical standpoint, it is readily apparent to the ear and distinctly present in several of the Washo songs. This is the only instance of a hot beat in American Indian music known to the present authors.

668
53.3

There is no suggestion of polymeter in the songs, even in such usage as melodic triplets on a duple rhythmic base.

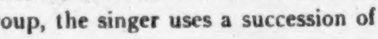
It is difficult to establish clearly the relationship, if any, between melodic and drum pitches. In songs in which the subjective tonic and duration tones (see below, p. 638) are identical, drum pitch is the same in but one case. In three songs, the drum pitch is two semitones above the ST-DT; in six songs it falls on the sixth degree of scale, in one case on the fourth degree, and in one case on the third degree. These relationships do not seem to indicate a clear tuning of drum in order that melodic pitch may be taken from it. At the same time, it is fairly noticeable that when drum pitch changes within a song cycle, the subjective tonic seems also to change; when drum pitch remains stable, subjective tonic tends to remain stable. It should be pointed out that the drummer changes pitch before the singer—that is, between songs—and thus it seems unlikely that it is he who alters his drum pitch to conform to the pitch chosen by the singer. At the same time, Washo singers say that "the drummer is supposed to tune to the singer and follow the rhythm of the gourd," or "the drummer has to tune the drum according to the singer's pitch." No distinct relationship can be established here; it seems, however, that drum pitch is probably used by the singer, either consciously or unconsciously, as a guide.

Instrumental and vocal introductions and closings

In discussing instrumental introductions and closings, it is perhaps wisest to follow through a single cycle of four songs. Cycle I is begun with 72 beats of drum and rattle alone, and the first song terminated by a drum tremolo which decrescendos from *forte* to *piano* and which is followed by a single eighth note tap. The tempo is then resumed almost immediately on the drum, the rattle rejoins it, volume is increased to *forte*, and 52 beats mark what seems to be the introduction to the second song. Song 2 again closes with a drum tremolo alone, the same decrescendo, followed by the resumption of tempo, the rejoining of the rattle, and crescendo, for 48 beats to the third song. Song 3 is not closed by a tremolo; rather, there is a brief space of two beats of silence, after which drum and rattle resume at tempo for 96 beats. The final song ends with a drum tremolo. In general, this is the pattern for all songs, with some slight variations such as the substitution of a rattle for the drum tremolo, changes in length of percussion material between songs, and other minor points. It should be pointed out that there is but one clear break between songs in any cycle; this occurs between songs 2 and 3 in Cycle III and is probably traceable to nervousness on the part of the performers.

[53

There are four instances of vocal introductions in the 21 songs; in song II,1, typical of the group, the singer uses a succession of tones on the tonic:



This introductory material, if it can be called such, is separated from the true

8: Merriam& d'Azevedo E-4, 5 (1954-1955) 1957
NT20 Washo NT20

668*
533*

beginning of the song by seven beats' rest. In song II,3, the same kind of pattern is separated by ten beats; in songs IV,1 and 3 by sixteen and three beats respectively. The pattern occurs only in the songs of one individual who, when queried on the matter, reported: "it is not a real part of the song; it's only warming up and getting the tune before you start. That's to remember the tune and get in line with the drum." Such introductions, then, cannot be considered typical of the group of songs; they appear instead to be a personal idiosyncracy of the singer.

Tonal range

The tonal ranges of the 21 Washo Peyote songs are divided sharply into two distinct groups, one of exceptionally wide range and the other of medium distribution. In the former group are ten songs, five with a range of 19 semitones, three with a range of 17 semitones, and one each with a range of 18 and 23 semitones; these are exceptionally wide ranges. The second group of eleven songs shows a scattering of range—three songs have ranges of 7 semitones, two songs of 9 and two of 12 semitones, and one song each with a range of 13, 11, 10, and 8 semitones. The two groupings are distributed, then, about centers of 19 and 10 semitones respectively. There appears to be no correlation to singer (the same singer uses wide and narrow ranges in different songs); to the supposed or real place of origin of the songs (some songs learned from the Bannock have wide ranges, and some narrow); to variation or repetition, which will be discussed below; or to any other observable cause. Thus the sharp double grouping appears perhaps to be simply a statistical anomaly which would be erased with consideration of a wider sampling, but until such a sampling is obtained, no definite conclusion can be reached here.

Melodic direction and contour

The general contour of the melodic lines of the Washo songs is indicated clearly by the relationships among the beginning (B), ending (E), highest (H), and lowest (L) tones. Thus a clear downward direction is demonstrated by the fact that the ending tone is never higher than, or equal to the beginning tone in pitch; the smallest distance between B and E is seven semitones. Further, the distance from B to E, with but five exceptions, is also the total tonal range. In nine songs the ending tone is seven semitones below the beginning tone; in three songs, it is 17 semitones below; in six songs, 19 semitones, and in one song each, 12, 13, or 15 semitones below.

This strong downward direction is further emphasized by the relationships between B-H and E-L. In the former case, with but five exceptions the beginning tone is equal to the highest tone; in two songs the highest tone is one semitone above B, in one song each two, three, or four semitones. Similarly, the ending and lowest tones are identical in all but five of the songs; the exceptions show the lowest tone two semitones below E in two songs, and three semitones below in three songs.

Since in most cases B is identical with H, and E is identical with L, there

8: Merriam& d'Azevedo E-4, 5 (1954-1955) 1957
NT20 Washo NT20

668
*533

is no advantage in exploring the relationships B-L and E-H. Almost without exception, the songs show a clear downward melodic direction—in this respect, they are remarkably homogeneous.

There is, of course, some variation within this general contour. Taking the definition of the term "phrase" in its broadest sense, the melodic type seems to correspond reasonably well to what has been termed the "collapsing" mode of descent. In its simplest form, "the line is likely to descend in a series of smooth curves, most of which reach the tonic at the latter end and increasingly so as the song progresses" (McAllester 1949:71–2). In the Washo songs, while the initial introduction of the phrase is high and moves downward, it is not necessarily unbroken nor does it always become successively compressed toward the end of the song. Furthermore, in some cases the descent pattern is greatly elongated into an elaborate drop which, although collapsing in one sense, is not sharply or necessarily directly so.

At the same time, the subjective tonic is quite definitely reached very early in the song in the majority of cases; in twelve songs it is reached by the end of the first phrase, in seven songs by the end of the second phrase, and in one song not until the end of the fifth phrase. In one song, the phrase begins on the subjective tonic.

Flattening is the phenomenon whereby "as the final phrase approaches, the melody characteristically loses contour until it is perfectly flat on the tonic" (McAllester 1949:75). Again, this is basically characteristic of the Washo songs but does not seem to be marked as a total pattern. While the ends of songs are generally flat, they are not especially extended in relationship to earlier finals in the phrasing, and in some cases are shorter.

Melodic meter, note values, and ornamental devices

The melodic meter of the songs is rather widely varied both in the group at large and within specific songs; the exception is provided by six songs in which an unbroken 4/4 time division can logically be made. The remaining songs, however, cannot be written in any single meter and depend, rather, on the unit of the phrase for their division. Thus combinations of meters appear in a single song; for example, in song II,1: 4/4, 5/4 and 6/4 divisions are made; in an extreme case, IV,2: 7/4, 10/4, 6/4, 9/4 and 4/4 appear. Melodic meter, then, is not usually steady throughout the song, but is broken into irregular phrasing.

Note values in the melodic line are almost exclusively quarters and eighths, with a few dotted eighths also appearing. Syncopation is almost never used.

Ornamental devices include the rather consistent use of a strong falling release in which the singer allows his voice to drop downward from a tone; this device appears in thirteen of the twenty-one songs. Rising attack is used in eleven songs; in this case the singer begins his tone below its proper pitch and slides up to it. In one song a falling attack is used; this is a most unusual configuration and is possibly accidental in this single case. Portamento in the form of sliding from tone to tone appears in eighteen of the songs.

8: Merriam& d'Azevedo E-4, 5 (1954-1955) 1957
NT20 Washo NT20

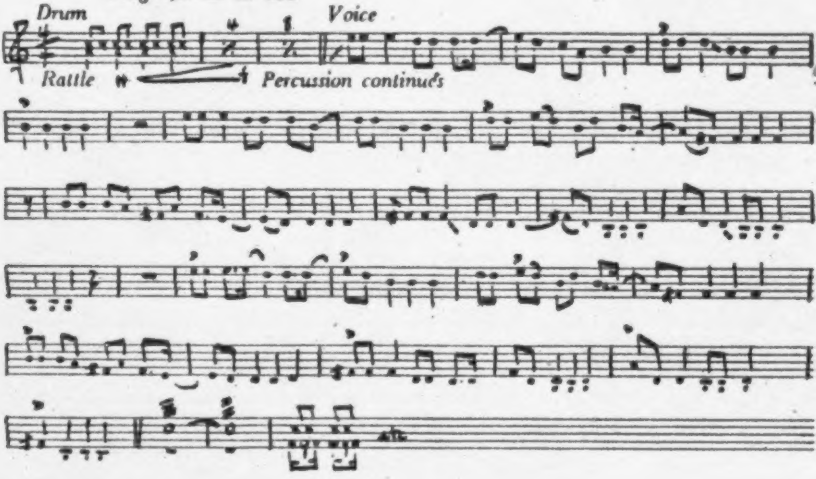
668*
533*

In addition, the dip or "double portamento," in which a pitch is established, allowed to slide downward for variable distance, and then returned to its original frequency, is found in three songs. The bend, a less marked version of the dip, appears in one song. No auxiliary tones are used as such.

Some use of dynamics is evident in both instrumental and vocal lines; the former is discussed elsewhere in this paper. Strong dynamics on the part of the singer are found in two songs; in II,3, a closing *sforzando* on the final tone; in song II,2, a definite decrescendo in a long falling phrase which is repeated in subsequent renditions. While strong dynamic ranges are not characteristic

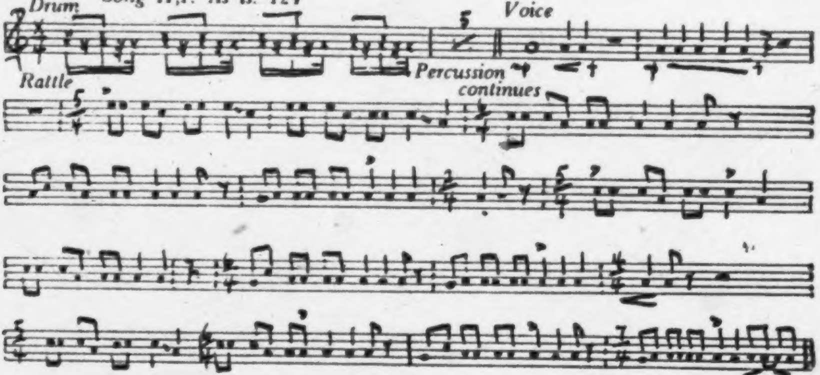
[text continues on p. 634]

Song I,2: As is: 128



668*
533*
539

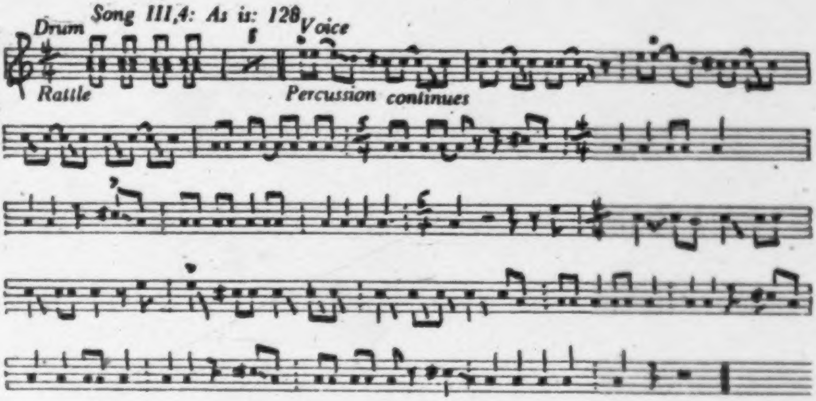
Song II,1: As is: 124



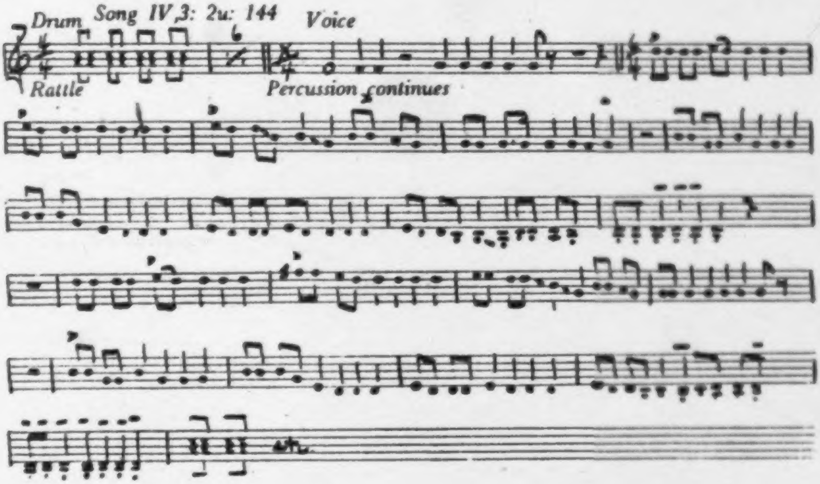
8: Merriam& d'Azevedo E-4, 5 (1954-1955) 1957
NT20 Washo NT20

*
668
* 533
539

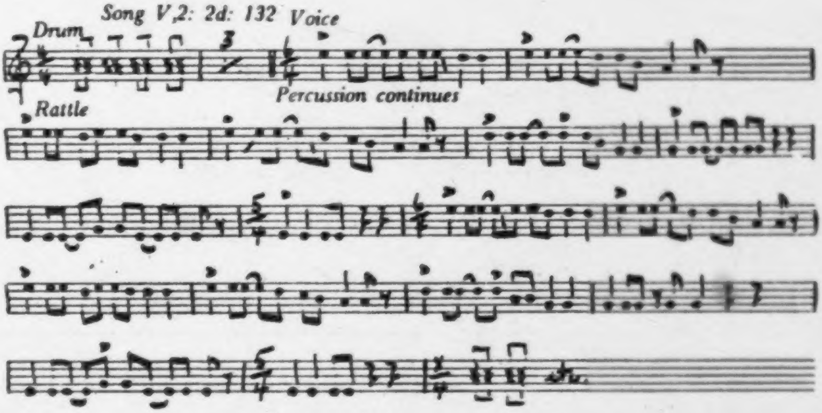
Song III,4: As is: 128


Drum
Voice
Rattle
Percussion continues

Song IV,3: 2u: 144


Drum
Voice
Rattle
Percussion continues
etc.

Song V,2: 2d: 132


Drum
Voice
Rattle
Percussion continues
etc.

8: Merriam& d'Azevedo E-4, 5 (1954-1955) 1957
NT20 Washo NT20

668*
533*

of the Washo songs, they are used for special effect and emphasized by the use of heavy accent which helps structure the melodic phrases.

Melodic intervals

Of a total of 336 ascending intervals, the major second, used most frequently, accounts for 44.3 percent, the minor third for 24 percent, the major third for 12.8 percent, the perfect fourth for 11 percent, the minor second and perfect fifth for 3.8 percent each. Of a total of 715 descending intervals, the major second accounts for 48.1 percent, the minor third 31.6 percent, the major third 10.8 percent, the perfect fourth 5.4 percent, minor second 3.7 percent, and perfect fifth .3 percent.

Thus of a total of 1051 ascending and descending intervals, the major second is most frequently used, 46.9 percent, followed by the minor third 29.2 percent, the major third 11.4 percent, the perfect fourth 7.2 percent, the minor second 3.8 percent, and the perfect fifth 1.4 percent.

This indicates a very high percentage of major seconds, which is a characteristic pattern for the Plains Indian area. It should also be noted that only five kinds of intervals are used and that none is wider than a perfect fifth, a very limited usage. Further, exactly the same kinds of intervals are used both ascending and descending, and in the same proportion. In general, a relatively conservative use of intervals seems to be indicated.

Sixty-eight percent of the total intervals used are descending, and 32 percent ascending, a marked differentiation which is again characteristic of Plains style. 79.9 percent of the intervals are narrow, that is, a minor third or less; 11.4 percent are medium, that is, a major third; and 8.7 percent are wide, that is, more than a major third. These proportions are striking in the heavy use of narrow intervals as opposed to wide.

Eight of the 21 songs use no wide intervals whatever. Three songs use only two types of intervals ascending, and one song uses but one ascending interval, a major second. On the other hand, song I,4, uses all intervals, both ascending and descending, with the exception of the minor second in both cases.

Melodic interval patterns

Usage of patterns of intervals wider than seconds is quite restricted in the Washo songs. Triadic split fifths (for example, CEG consecutively in the melodic line) appear in six songs, mf and Mf[a] Pendular thirds (for example, CECE) also appear in six songs, patterns including mfrf, Mfrf, mfrfrfr, and mfrfrfrf. Pendular fourths, a relatively unusual formation, are found in five songs, rf, fr, frf, frfrf, and frfrfr. And finally, pendular fifths, rf, appear in one song.

No single song, however, seems to be dominated by patterns of this kind, not even song II,5, for example, which uses three pendular fourth patterns and two pendular third patterns. This lack of emphasis again seems to reflect the predominance of use of major seconds as well as the contour of the melodic line in which the movement, steadily downward, does not allow for alternation

[a] [footnotes appear on p. 640 -- Analyst]

8: Merriam& d'Azevedo E-4, 5 (1954-1955) 1957
NT20 Washo NT20

*
668
*533

and elaboration. The patterns which are found are few in number and slight in importance; other patterns such as interlocked intervals, which appear frequently in, for example, many African songs, are not used at all in the Washo Peyote songs.

The repetitive monotone—four or more successive tones sung on the same pitch—appears in almost every song as a characteristic phrase and especially as a song ending. It is not important in other respects.

Formal structure

The phenomenon of paired phrases in its strictest sense does not seem characteristic of the Washo Peyote songs. However, as internal pairing it appears in ten of the twenty-one songs; it is strong in six of these. The variation ranges from a very weak usage in II,1—as Aab Bcd Ce Bcc' Cfe—to a strong usage, as in song III,4—Aaa Bbb'b" Aa'a' Bbb'b".

There are three major types of formal structure used in the Washo songs. Taking them in an order most convenient for discussion, Type III is least important, consisting simply of two songs, II,3, and III,3, which are irregular in pattern. The former shows a structure of Aab Bcd C Bcd Def E; in this case, the only repetition is phrase Bcd which appears twice. The formal structure for song III,3, begins with Aab Bcd Cef, of which the first two phrases are then repeated, followed by new melodic material Dghii'h. Another unique melodic section follows—Ejk—succeeded by further repeat which is not fully realized. The total structure, then, is: Aab Bcd Cef Aa'b' Bcd Dghii'h Ejk Aab' Bcd Dghjk.

The Type I structure, repesented by five songs, is, in its "purest" form, a straight ABC pattern which may or may not be repeated. The simplest form is found in song V,2—Aaa B C Aaa B C—and the most complex in song IV,3—Aaa' Bbc Cdef Dgh Aaa' Bbc Cdef Dgh. A variation of this form, which may be designated Type Ia, appears in song IV,1, in which the ABC pattern is still basic but the order is varied. Thus X (an introductory phrase which never reappears) Aab Bcd Cef Bccd Aab Bd Cef Bcd, or A B C B A B C B with slight variation. A second divergence from the same basic type may be designated Type Ib; this is represented by two songs, and is perhaps the most esoteric type found. Again, the structure is essentially ABC, but in repetition the initial part of the phrase is condensed. Thus V,3 is first presented as Aaa B C; on repetition, however, some melodic material is dropped so that the phrase becomes A½aa B C. This usage is identical in the two songs in which the pattern is found.

Most frequently used in the Washo Peyote songs is the formal structure Type II, which is clearly exemplified in nine songs and varied in two others. The form is also noted among Menomini Peyote songs (McAllester 1952: 682). In this particular type, melodic material stated in the first phrase of a song is not repeated, although subsequent material is. Thus, in simplest form (II,2) it may appear as A B C D B C D, with A never reappearing but B C D repeated. A more complex example (III,1) appears as: Aaa' Bbb Cccc' Bcc

Cccc′, and the most complex (I,4) is: Aab Bcd Cef D E F G H Cef D E F G H. 668*
It is at least conceivable that a type of "paired" phrase is indicated here, with 533*
the pairing occurring in terms of combinations or groups of phrases; however, this seems to be too far from the original conception to allow reasonable use of the term. Finally, two variations of this form are found, the first (II,4) stated: Aaa′ Bbb Ccd Bb′bb″ Ccd, the variation to be noted in the addition of an extra subphrase, b. The second variation (II,5) is more distinct: Aa Bb C D Bb′ C D Aa′ Bb″ C D; in this case, almost a hybrid between Types I and II is formed.

It is of considerable interest in this connection to note the problem of what constitutes variation in the Washo songs. The Washo themselves distinguish three forms in listening to playbacks of their own recordings; these can be designated as follows: (A) a song is sung but once; (B) a song is sung and repeated; (C) a song is sung and is then varied. These seem to represent fairly clear-cut categories, but cursory inspection shows the formal structural analysis undertaken above simply does not coincide with Washo opinion. Thus, in the first cycle, the formal structures are, in order, Types Ib, II, II, II; the singers analyze all four songs as having been sung once, or their Form A. The problem becomes more difficult when it is noted that several songs which are Type II in structure are considered by the singers to be Form B, that is, an exposition and a repetition. Again, of the songs considered by the singers to be varied, that is, Form C, one is Type Ia and the other Type I in structure, both of which are almost straight repetitions. Further, another song considered by the singers as Form C with three variations falls clearly into Type II. It should be noted here that the singers, in studying their performances, were considering the total rendition in differentiating among variation, repetition, and a single singing.

Without laboring the point further, it is clear that while the principles upon which such differentiation is made may be clear to the Washo, they must be based upon something other than structure as it is conceived in Western music analysis. While these principles are not known to the present authors, some possibilities and also some contradictions may be discerned from comments made by the singers. Thus informant Y distinguished between a song that is repeated and one that is sung through only once by indicating that all Peyote songs begin on a high line and slowly descend to the end of the song. If the song is then being repeated, it returns to the highest beginning note; the same informant reports that if a song is "repeated" on a lower register, it is "part of the same song." At another time, this informant reported that one of his songs with a Type Ib formal structure was sung through only once: although it might sound as though it has been repeated once, "that's because the same tune is sung high and then low." Again, informant Y pointed out that "you can tell when a song is finished when the singer reaches that real heavy low voice. If he is going to repeat the song he starts up high again. If there is no pause this makes it all part of the same song." The point to be

*
668
*533

made, obviously of considerable importance in discovering the meaning of "variation" and "repetition" so far as the Washo are concerned, is that the informant was indicating that the melodic line, repeated in two registers, is the form of a complete single song and not two variations of the same song.

That there is some formulation of the principles involved is made clear from the comment of X, who, in hearing his version of a song, noted somewhat lamely that only one variation had been sung—"maybe because I was lazy or worried about that tape recorder. It ought to be sung twice (two variations)." Again, X noted that time is an important factor in making a song sound correct, and that a song has to be repeated or varied for a certain number of times over the "right" period of time to make it complete. It also seems fairly certain that aspects of song texts have some bearing on the problem—"it isn't the same song; the words are all different." "It is almost the same song as the second one . . . but it has a little different words."

It is finally of interest to report that comments of two singers on the songs of a third tend only to cloud the issue further. For the four songs of Cycle I considered, the following shows, in order, the type indicated by Western structural analysis, the form declared by informant Y, the form indicated by informant X: Song 1: Type II; Form B (repeated twice); Form B (repeated one and a half times); Song 2: Type I; Form C (two variations); Form B (repeated twice); Song 3: Type Ib; Form B (repeated twice); Form B (sung through one and a half times); Song 4: Type II; Form B (repeated six times); Form B (" he sings it one and a half times"). Further inquiry among other Peyotists and Peyote singers yielded the same confusing results; agreement on what constitutes repetition and/or variation is quite rare. This may perhaps indicate only the short period of time that the Washo have had Peyote songs; on the other hand, since the terms are at least verbalized, this may be a period in which such concepts with respect to music are only just emerging. Comparison of the Peyote with "ordinary" Washo songs could conceivably shed some light upon this problem.

The shortest phrase length is found in song I,4; it is four beats in duration. The longest phrase, 32 beats, is found in song I,1. The average length seems to center about approximately 14 beats. Phrases of odd numbers of beats are common, appearing in thirteen of 21 songs; such beat lengths as 9, 11, 17, and up to 29 are present, the most common—appearing in ten songs—being 13 beats.

Two songs (IV,1, and III,4) are constructed in what has been called the "broken triad" form, that is, exclusively on the three tones of a major triad. McAllester (1949:71) points out that 15 of his 84 examples are based on this type (17 percent plus) which, he says, is a higher percentage than normal. In the present case, two of 21 songs (9 percent plus) use the structure, and thus its significance remains to be determined. On the face of it, it would seem that this is a Comanche Peyote concentration, as posited by McAllester, rather than a Peyote concentration at large.

8: Merriam& d'Azevedo E-4, 5 (1954-1955) 1957
NT20 Washo NT20

Scale, mode, duration tone, and subjective tonic

Confining discussion to the number of tones actually utilized within the 668*
octave, the majority of scales of the Washo songs is pentatonic; there are 533*
twelve such songs. Six songs are tetratonic; two are the relatively rare tritonic, and one is hexatonic. Modally, six songs are penta do, five penta la, and one penta sol; three are tetra la, one each tetra sol, tetra mi, and tetra re-mi; the duration tone of the tri types is do in both cases; the hexatonic is hexa sol. These are all quite normal types.

The subjective tonic and duration tones[2][1] are identical in 16 of the 21 songs, indicating again the normality of the modal structures. Further, the duration tone is found on the fifth of the subjective tonic scale in four of the remaining songs, indicating a tonic-dominant relationship, and on the sixth degree in the fifth, indicating a probable major-minor confusion on the part of the transcriber.

Tonality seems to be fairly well defined, although sometimes slightly confusing; there are no modulations.

Tempo

The range of tempi for the Washo songs is not especially wide, varying from 116 to 148 beats per minute, based on the quarter note; in addition, there is one drum tempo of 160 beats, which seems to be abnormal for the series. The average tempo may be placed in the range from 136–40.

The problem of tempo, however, is complicated by the fact that the tempi of voice, drum, and rattle are frequently dissimilar; the extreme example is song I,1, in which the melodic tempo is 120, that of the drum 160, and that of the rattle 148. In twelve of the songs, the vocal and rattle tempi are identical, but different from that of the drum—the largest disparity is 28 beats, the smallest 8. In eight songs the tempi of all three parts are equal.

The widest range of tempi noted above—116 to 148 beats per minute—is found in the drum. Vocal tempi range from 120–44, rattle tempi from 124–48.

McAllester (1949:76–8) has noted that Peyote songs are "prevailingly *faster* than most Indian music," in pointing out that the range of songs he studied was from 92 to 164 beats per minute. This contention seems to be borne out substantially by the present findings.

The Cycles

Since the songs are sung in sets or cycles, their relationship to one another within the cycle is of interest here. This relationship is quite close in one of the cycles, relatively distant in the others; there seems to be no basis for assuming a structural musical relationship.

Cycle I is rather remarkably homogeneous. Its meter is an unvarying 4/4 throughout the four songs; the tonal ranges are almost identical (17, 17, 19, 19); patterns of melodic direction show practically the same degrees of movement in the same directions; with the exception of song 1, phrases are very similar (Types Ia, II, II, II); the subjective tonic and duration tone are

2/1 [footnotes appear on p. 640 -- Analyst]

8: Merriam & d'Azevedo E-4, 5 (1954-1955) 1957
NT20 Washo NT20

* 668 *533

identical in three of the four songs; the distribution of interval usage is very similar; the modal structures are almost identical (3 penta do and 1 penta la). Whether by accident or design, the four songs in Cycle I are markedly homogeneous.

Cycle IV, as an example, shows considerable diversity in musical material. Metric changes are apparent not only within songs but between them; tonal range varies from 7 to 23 semitones; melodic direction patterns are fairly similar; phrase patterns are varied (Types II, I, I, II); subjective tonic and duration tone are identical in three of the four songs; distribution of interval usage is quite varied; the modal structures are by no means identical (tri, tetra, penta, penta).

It remains to be pointed out that Cycle V is considered by the singer to consist of four variations or repetitions of the same song; to the ear, the similarities among the versions is clear. In analysis, however, some differences are noted: meter varies; tonal range is fairly close, as is melodic direction; phrase patterns vary markedly; subjective tonic and duration tone are equal in two of four songs; interval usage is very similar throughout the cycle with no wide intervals used at all; modal structures are varied (penta, tetra, tetra, hexa).

The conclusion to be drawn is simply that the ethnographic evidence in the matter of choice of songs for a cycle is borne out by the musical evidence —the choice may clearly be cohesive or not cohesive musically, and the basis for choice seems to rest on considerations other than musical sound.

IV

* 668 *533 114

Comparison

A comparison of the songs under discussion here with the Washo songs analyzed by McAllester (1949:54–6) is slightly disturbing in the fairly consistent differences which appear between the two. Thus, McAllester speaks of uncomplicated structure, moderate tempo (106–36), simplicity of melodic line, short length, normalcy of five, six, or seven repetitions, no rhythmic changes at the ends of the songs, range almost never more than an octave and often as little as a fourth or fifth, most songs in the simple ABC pattern, and uniform phrase lengths; each of these is in almost direct contradistinction to the songs analyzed here. Some similarities are present, however, including the facts of no introductory formulae, time values of individual notes almost wholly restricted to eighth and quarter notes, general contour of melodic line, the division of each phrase into two sections, textual material consisting almost entirely of vocables, the sameness of these vocables, the use of something like *heya wana yo wana* in almost all songs, and the singing of one syllable to the note. So far as the present authors are concerned, the question of why these differences occur remains a problem for future research.

In comparison with the general characteristics of Peyote style summarized by McAllester (1949:80–2), there is considerably more agreement, and the Washo songs for the most part seem clearly to fall within the general pattern.

1) In manner of singing, the Peyote style is lacking in the tenseness frequently noted as characteristic of American Indian singing in general. The Washo songs conform to the Peyote style in this respect. 668* 533* 114

2) Peyote songs are usually sung at a brisk tempo averaging approximately 130–140 beats per minute; moreover, this tempo is maintained throughout the song with little variation. The Washo songs conform to the Peyote style.

3) The characteristics of drum and rattle accompaniment noted by McAllester cannot always be applied to the Washo Peyote songs. Thus it is not true in the Washo songs that "these instruments are played at the same speed as the vocal part of the song," and that "it is clear that the intention is for [the voice and instruments] to be at least approximately together. . . ." In these respects, the Washo songs do not concur with McAllester's Peyote style.

4) Note values in the Peyote style are restricted almost exclusively to the quarter and eighth note; the Washo songs show this characteristic.

5) In structure, there are again some differences. In the following Peyote characteristics, the Washo songs do not conform: vocal introductions present, a tendency toward restricted range, and long flattened coda-like section at the end of the song. In the following respects, the Washo songs do conform: phrase patterns of Plains type; and an incidence of a type of paired phrases.

6) The cumulative use of the tonic in finals is partially apparent in the Washo songs.

7) There is considerable textual consistency in the Washo songs, including the use of variations of what seems to be the standard Peyote phrase, *he ne ne yo wa*.

In four of seven characteristics, then, the Washo songs are close to the general Peyote style indicated by McAllester. In the remaining three characteristics there are some marked differences, such as in structure, and some partial similarities, such as the cumulative use of the tonic in finals. It seems clear that the Washo songs are basically in the Peyote style with some individual idiosyncracies apparent.

NOTE ON THE TRANSCRIPTIONS

The songs notated are representative of the various cycles; each is headed with pertinent information in abbreviated form. Thus the legend for the fourth song, "Song IV,3: 2u: 144," indicates that the song is the third in the fourth cycle, that the original pitch was 2 semitones higher (2d would indicate the original pitch to be 2 semitones lower, in each case without regard for octave), and that the tempo of the vocal line is 144 beats per minute. The basis for the tempo figure is the quarter note; the songs are notated in that key in which the majority of notes falls within the limits of the regular staff lines. Special signs used are those standard in ethnomusicology. 104 668* 533*

NOTES

[1] Abbreviations used: M—major; m—minor; dim—diminished; r—rising, f—falling. Further explanations of the various interval patterns may be found in Kolinski 1936:498–501. 668* 533*

[2] Duration tone refers to that tone which is most heavily weighted throughout the song as defined by actual duration count. The subjective tonic designates the subjective criterion of a key feeling, or tonality, as observed by Western musicians in respect to Western musical traditions. [104]

8: Merriam& d'Azevedo E-4, 5 (1954-1955) 1957
NT20 Washo NT20

REFERENCES CITED

KOLINSKI, M.
1936 Suriname music. *In* Melville J. and Frances S. Herskovits, Suriname folk-lore. New York, J. J. Augustin.

KROEBER, A. L.
1907 The Washo language of East Central California and Nevada. University of California Publications in Archaeology and Ethnology 4:251–318.

LOWIE, ROBERT H.
1939 Ethnographic notes on the Washo. University of California Publications in Archaeology and Ethnology 36:301–52.

MCALLESTER, DAVID P.
1949 Peyote music. New York, Viking Fund Publications in Anthropology, Number 13.
1952 Menomini Peyote music. *In* J. S. Slotkin, Menomini Peyotism. Philadelphia, Transactions of the American Philosophical Society, n.s. Vol. 42, Pt. 4, pp. 681–700.

NETTL, BRUNO
1953 Observations on meaningless Peyote song texts. Journal of American Folklore 66:161–64.

SISKIN, EDGAR E.
1941 The impact of the Peyote Cult upon shamanism among the Washo Indians. Doctoral dissertation, Yale University.

STEWART, OMER C.
1944 Washo-Northern Paiute Peyotism: a study in acculturation. University of California Publications in Archaeology and Ethnology 40:63–142.

[For generalized information on the Washo-Peyote cult, see entire source, category 116, pp. 615-640.]

533

[For information on Washo-Peyote music and song structure, see category 116, pp. 617-640.]

116

116 TEXTS--a full set of pages from each processed source, arranged in page order, as a means of establishing the context for any particular slip. Sets are arranged in the numerical order of the sources. See also:

Literary texts 539

UNIVERSITY OF UTAH
Department of Anthropology

ANTHROPOLOGICAL PAPERS

000

NUMBER 67 AUGUST, 1963

The Washo Indians of California and Nevada

Compiled and Edited by WARREN L. d'AZEVEDO

By S. A. BARRETT, WARREN L. d'AZEVEDO, STANLEY A. FREED,
RUTH S. FREED, PHILIP E. LEIS, NORMAN A. SCOTCH,
FREDA L. SCOTCH, JOHN A. PRICE,
JAMES F. DOWNS

DAVID M. PENDERGAST, *Editor*
CAROL C. STOUT, *Associate Editor*

UNIVERSITY OF UTAH PRESS
SALT LAKE CITY

Title Page]

THE WASHO INDIANS OF CALIFORNIA AND NEVADA

by

S. A. Barrett, Warren L. d'Azevedo, Stanley A. Freed,
Ruth S. Freed, Philip E. Leis, Norman A. Scotch,
Freda L. Scotch, John A. Price, James F. Downs

Number 67 August 1963

ANTHROPOLOGICAL PAPERS

Department of Anthropology
University of Utah

DDC

CE51
+U83
67

[P. ii]

000

TABLE OF CONTENTS

Page

PREFACE, by S. A. Barrett v

INTRODUCTION, by Warren L. d'Azevedo 1

A RECONSTRUCTION OF ABORIGINAL WASHO SOCIAL ORGANIZATION,
by Stanely A. Freed.................................... 8

THE PERSISTENCE OF ABORIGINAL CEREMONIES AMONG THE WASHO INDIANS,
by Stanley A. Freed and Ruth S. Freed 25

A CONFIGURATION OF ABORIGINAL WASHO CULTURE,
by Stanley A. Freed and Ruth S. Freed 41

WASHO WITCHCRAFT: A TEST OF THE FRUSTRATION-AGGRESSION HYPOTHESIS,
by Philip E. Leis 57

SOCIAL FACTORS IN HYPERTENSION AMONG THE WASHO,
by Norman A. Scotch and Freda L. Scotch 69

WASHO PREHISTORY: A REVIEW OF RESEARCH,
by John A. Price 78

SOME ASPECTS OF WASHO LIFE CYCLE,
by John A. Price 96

DIFFERENTIAL RESPONSE TO WHITE CONTACT: PAIUTE AND WASHO
by James F. Downs 115

WASHO RESPONSE TO ANIMAL HUSBANDRY
by James F. Downs 138

AN ANNOTATED BIBLIOGRAPHY OF WASHO SOURCES
by Warren L. d'Azevedo and John A. Price 153

[P. iV is blank]

PREFACE

With the inception of the Ethnological Group Building Program in 1910, of the Milwaukee Public Museum, plans were made to represent in this graphic form each of the great culture areas of North America. One of these was that of the "Great Basin," that vast semi-desert, plateau lying between the Sierra Nevada and the Rocky Mountain Range. (21

The Paviotso branch of the Paiute were chosen as typical representatives of this cultural group. Work was concentrated in the western portion of this area where at that time (1915) there was surviving a better representation of that culture than could be found elsewhere.

Publications were in those days much fewer than we have now. There were, in fact, only a few trained workers in the anthropological field. Consequently, to get reliable data and information in sufficiently detailed form to permit accurate reproduction of a culture in group form, it was necessary that one go into the field and make his own personal observations, sketches and photographs. This required a thorough canvass of the culture area involved, which took months. At the end of this period, when the ethnographer had in hand all possible information needed to reconstruct the old life in the area, the chief artist was sent for. The two, together, spent a final month in the field building a scale model of the life-sized group -- also of any special dioramas or other exhibits needed as auxiliaries -- to be finally built in the Museum.

This rather extensive field procedure often furnished interesting special contacts. In 1915 one of these was my hasty contact with the Washo Indians in the region of Lake Tahoe. [114]

These, it must be remembered, were the days when automobiles were a rarity: the real old "horse and buggy days." Now the whole shore of Lake Tahoe is built up with resorts, hotels, motels and beautiful summer homes. Now you spin along in your car at any rate you please on the perfect highways and freeways. The beautiful surface of the lake itself is cut in every direction by the wakes of many motor boats. In 1915 I could walk miles at a stretch without meeting a soul, especially on the south shore, as I followed sketchy directions in trying to find some distant camp of a Washo family. When I finally arrived I would find some patriarch patiently chipping arrowheads or making a bow preparatory to going on a hunt for deer in the adjacent forest. We did not have to listen to tales of the olden times then. We had these "olden" times spread out before us for inspection. One can only regret that we had not more time to see all these things or that there were so few trained ethnologists to observe things.

{2}

We are now most fortunate to have more workers to study the survivals of cultures and to publish the results of their labors. The several papers and analyses here presented are, we hope, only the beginning of more extensive publications on the Washo and on other tribes in this Great Basin area, one of the most interesting regions left in America.

S. A. Barrett
University of California
Berkeley, California
May 18, 1962

INTRODUCTION

Like many other Great Basin peoples the Washo have been unevenly 101
studied by professional anthropologists. A common theme that runs through 177
much of the early written comment, and into the ethnographic literature of
the first few decades of this century, is the anticipation of their imminent
extinction. In the very earliest accounts of mountain men and travelers they
were frequently mistaken for Paiutes, and in the reports of the Indian agents
of the 1850's and 60's they were seldom considered worthy of mention except
as an extremely depressed and dependent group in the process of dying out
or being absorbed by their more aggressive neighbors.

Population figures reported during the 19th century were highly con- [161]
tradictory and misleading, for they failed to take into account the extreme [14]
mobility of the Washo, and the dispersed character of settlement pattern even
during the winter months. Furthermore, the Indian agents were concerned [361]
primarily with those peoples within their areas of jurisdiction who presented
well defined administrative and political problems to the government in the
protection of the interests of American migrants and settlers. The Washo
offered minimal resistance to the intruders. They were never sufficiently [361]
organized to make effective demands in their own behalf, and within a very
few years of contact part of the population had established itself in semi-
sedentary dependent colonies around white settlements. It was groups of this
sort -- particularly in the vicinity of major white settlements in the Carson
and Truckee valleys -- that were identified as "The Washo tribe" in early
reports. Little or nothing was known of actual territorial distribution of the
people, and agents were ignorant of many bands that maintained some degree
of autonomy and isolation.

Another factor of importance in defining the status of the Washo as a 13
group is the placement of their territory in relation to westward American
expansion. The core of this territory is made up of a chain of fertile valleys
on the eastern slope of the Sierra Nevadas from Antelope Valley in the south
to Honey Lake in the north. The abundance of water, fish, small game, edible [222]
plants and seeds made this a relatively rich region for hunters and gatherers.
The extensive growth of pinenut trees on the mountains forming the eastern
boundaries of their territory and the availability of acorns on the western
slope of the Sierras provided large harvests of staple seeds. Large game
was also plentiful in the mountains.

The attractiveness of this region, and its potentialities for farming 177
and grazing, were noted by the first travelers who passed through it to
California after enduring the arduous trek across the dry expanse of the

177 central Great Basin. By the end of the 1840's there were a number of rest stations for emigrants, at the foot of new trails across the Sierras, in Carson and Eagle valleys, on the Truckee River, and in Sierra Valley. Thousands of head of cattle were grazed there, and wagon trains paused for months at a time waiting for the appropriate season for the final crossing. By 1859 gold had been discovered in the area, logging and lumber became a major industry, ranches and farms created a network of fences in most of the valleys, and numerous white settlements had sprung up containing a rapidly increasing population of permanent settlers, miners and laborers.

161 There is some evidence that the Washo may have suffered a drastic
164 decrease in population and some tribal disorganization prior to these events
17 of the 1840's and 50's. Extensive epidemics had raged through the Indian
tribes of central California during the first few decades of the 19th century,
and Washo legend contains numerous references to the devastation of entire
[648] bands by disease before the period of American settlement. There are also
legends of early Spanish expeditions, the working of mines in the mountains,
and the capture of Washo children. The publication of more of the records
of these expeditions may bring to light material of considerable importance
with regard to initial Washo contacts with non-Indians.

177 At the point of first intensive white contact in the late 1840's and early
648 1850's the Washo also appear to have been under attack from mounted groups
of Paiute, and there is every indication that their willingness to cooperate with
[231] whites was a response to the need for protection from Paiute raiding. The
Washo never adopted the horse for hunting or warfare as did their neighbors
directly to the east, and this fact put them at a great disadvantage during the
tumultuous years of competition between the newly emergent raiding bands
of the Paiute and the white emigrants. That they never surmounted the effects of this initial inferiority of status is borne out by their almost total
eclipse in official records during the remainder of the 19th century, and by
the neglect of their desperate condition on the part of government and local
[161] administrators. This is all the more curious in view of the fact that they appear to have increased in population during the past hundred years, and have
maintained viable social groups and cultural continuity.

175 Though historical documentation and early ethnographic comment con-
177 cerning the Washo are meager, what resources do exist are of great poten-
tial value to the student of their culture. The first phase of the historical
113 record is that marked by the journals and reports of trappers, explorers and
emigrants prior to 1850. The initial venture over this section of the Sierras appears to be that of Jedediah Smith and a party of trappers who went into Spanish California by way of Walker Pass in 1825 or 1826. In 1833 Joseph Walker led a party of trappers up the Truckee River to California, and a diary of the trip was kept by Zenas Leonard, a member of the party.

During the 1840's almost every year is marked by one or more American groups passing through Washo country and leaving some small record of their experience and observation. J. B. Bartleson and John Bidwell went over the Sonora Pass in 1841, and in 1843 Joseph Walker successfully ventured the Walker Pass. In the same year Overton Johnson and William Winter came down the Truckee River and described the conditions of the Washo Indians they found dwelling there. John C. Fremont and Kit Carson discovered the Carson Pass in 1844, and William T. Hamilton wrote of his experiences leading a group of trappers to Honey Lake and Lake Tahoe in the same year. The diary of Moses Schallenberger of the Stevens-Townsend party, who wintered near Donner Lake in 1844, is a document of special importance for this period. The following year Fremont came over the Donner Pass, and in 1846 both the Stephan Cooper Party and the ill-fated Donner Party also attempted the pass. The Mormon Battalion crossed over the Sierras into Carson Valley in 1848, cutting a wagon road as they came; in the same year the treaty of Guadalupe Hidalgo was signed and gold was discovered in California. 175 177 113

A remarkable aspect of these early treks through territory occupied by the Washo is the infrequency of any mention of the inhabitants in the written accounts. An occasional lone Indian or an isolated party of gatherers might be noted, and these are invariably reported as wretchedly poor and frightened. With the exception of the small settlements described by Johnson and Winter on the Truckee River, there is no indication of Washo having been seen in the regular habitation sites that are known to have existed in the valleys through which the American parties traveled. One explanation for this is provided by the Washo themselves whose oral traditions state that the valley people fled to the hills when scouts warned them of the approach of strangers. In the period of increased trapper and emigrant activity it is said that the Washo moved their settlements to more remote sections of these areas and kept constant watch over the movements of the intruders. It was not until the appearance of large groups of emigrants and the opening of trading posts and permanent white settlements that the Washo began to make themselves known. The development of a dependent relation to whites was accelerated by the disruption of their seasonal hunting and gathering activities through alienation of land, cattle grazing, and epidemics during the first decade or two of contact.

The second phase of the historical record is that of the reports of settlers, Indian agents, and travelers from 1850 to about 1877. With the discovery of gold in California emigrant wagon trains increased. The creation of the Territory of Utah in 1850, including much of the present state of Nevada, encouraged Mormon settlement. The trading post at Genoa was known as "Mormon Station" and immigrants began to settle in Carson Valley as well

as in the valleys to the north. The reports of the agents to the Commissioner 175
of Indian Affairs provide brief but significant comment on the Washo during 177
this period. But, as indicated above, the reports were dominated by the
agents' preoccupation with the more aggressive and populous Paiute and Shoshone in the eastern sections of Utah Territory. 113 Settler diaries are another source of data, though few of these have been published and they, too, indicate little interest in the Washo, who apparently created few problems for the whites.

The period of professional ethnographic observation of the Washo may 113
be said to have begun with the work of Stephan Powers in the 1870's. His manuscript The Life and Culture of the Washo and Paiutes written in 1875, and his contribution to the annual report of the Smithsonian Institution, Centennial Mission to the Indians of Western Nevada and California in 1876, are the first attempts to present the results of scholarly survey of these people. During the same period A. S. Gatschet made the first formal statement concerning the Washo language in an article Indian Languages of the Pacific States and Territories published in 1882. His data were derived from vocabularies collected by Powers and others. The pioneering work of John Wesley Powell should be mentioned here, as well, for his efforts to summarize the data on Indian languages and their distributions in his 1891 work, Indian Linguistic Families of America North of Mexico, included all that was known of the Washo language. This was also the period of important historical works such as Thomas Thompson and Albert West's History of Nevada published in 1881, and Hubert Howe Bancroft's History of Nevada, Colorado and Wyoming published in 1890. These works provide interesting data on early Indian-white relations, and little known events in which the Washo figured.

At the turn of the century C. Hart Merriam collected extensive vocabulary and cultural checklists from among the Washo. Though these manuscripts have not been published, they are among the most complete sources of data on the Washo from that period (1904). Dr. Simeon L. Lee, a resident of Carbon Valley and an amateur collector, was active for many years assembling a quantity of Washo technological products which were later donated to the Nevada State Museum. This collection, and the accompanying journal by Dr. Lee, constitute a prime source of information concerning Washo material culture of 60 or more years ago.

In the first few years of the 1900's the extremely vigorous investigations of California and Great Basin Indians initiated by A. L. Kroeber and R. H. Lowie resulted in increased ethnographic knowledge about the Washo. Roland B. Dixon's study of the Maidu included materials concerning their relations with the Washo and the delineation of territories. His articles, in collaboration with Kroeber, on the languages of California included the Washo, and anticipated Kroeber's formal analysis of Washo in 1907, The Washo Language of East Central California. S. A. Barrett worked among the Miwok, the immediate western neighbors of the Washo, during the first decade of the 1900's. In 1917 he published the first ethnographic monograph on Washo culture, The Washo Indians. About the same time Edward Sapir published two definitive articles, The Status of Washo, and Supplementary Note on Salinan and Washo. In 1926 Lowie turned his attention briefly from the Shoshone, Ute and Southern Paiute to study the Washo. His Ethnographic Notes on the Washo appeared in 1939. An extensive collection of Washo myths has not yet been published. Grace Dangberg's Washo Texts appeared in 1927, and her field notes gathered over the many years of her residence in Carson Valley are a major ethnographic resource. 113

Though the published materials listed above constitute a valuable accumulation of data about the Washo people and their culture, no part of it represents the result of intensive field work or continuous interest in a particular group in the same sense that many other tribes in California or the Great Basin have been studied. In the 1930's two ethnologists worked for extended periods among the Washo directing special attention to the newly introduced Peyote Cult and to problems of acculturation. Omer Stewart's monograph, Washo-Northern Paiute Peyotism: A Study in Acculturation, is an important contribution to studies of the diffusion of this cult, and is a classic description of its introduction among the Washo while the investigator was in the field. His culture element lists for Northern Paiute, Washo, and Achomawi were completed about this time and, along with his excellent survey, The Northern Paiute Bands, provide some of the best and most complete data available for the area. Edgar Siskin's dissertation, The Impact of the Peyote Cult upon Shamanism among the Washo Indians, has been widely appealed to by recent students of the Washo for its detailed data concerning the last of the Washo shamans and its cogent analysis of the role of the Peyotists in the dramatic period of culture change in the late 1930's. [114]

No further field work or publication was carried out with regard to the Washo until the 1950's. During the past decade, important archeologic investigations have been undertaken in the region by Robert F. Heizer, Albert B. Elsasser, Martin A. Baumhoff, and others. Francis A. Riddell's archeologic and ethnologic work in the Honey Lake region has provided numerous data concerning the relations of the northern Washo and adjacent Paiute bands. During the same period William H. Jacobsen, Jr., gathered extensive linguistic materials toward a new analysis of the Washo language.

The collection of papers in the present volume represents all of the students who have made any ethnologic investigation among the Washo since 1952. Though some of the authors have published elsewhere on the group, 114 128

the materials they have presented in these pages provide a considerable ad- 114
vancement of our knowledge of these Great Basin people and makes this work 128
easily available to the reader. It is hoped that an effort of this kind will stimulate further research in the Great Basin and encourage others to organize and present the results of field work from other sections of the area.

All of the contributors to this volume, with one exception, share a 114
tradition of having conducted their first field projects among the Washo. We are honored by the preface from Professor Samuel Barrett whose interest in the Washo and other western American Indian groups goes back to the turn of the century, and whose monograph in 1917 was the first major study of this culture by a professional anthropologist. Professor Barrett resides in Berkeley, California, where he is Research Professor and Director of the American Indian Films project organized by him and the late Alfred L. Kroeber at the University of California. His recent excursions among the Washo and other Indian communities have provided filmed records of customs and technologies that might soon have been lost to us forever. The resulting motion pictures are considered to be among the finest of their kind.

Ruth and Stanley Freed conducted field research among the Washo intermittently from 1952 to 1957. Their interests were directed primarily to social organization and acculturation. Stanley Freed's published dissertation, Changing Washo Kinship, is an important recent contribution to Great Basin studies. He is, at present, Assistant Curator of North American Ethnology at the American Museum of Natural History. Philip Leis, an assistant professor at Brown University, worked among the Washo in the summer of 1954 with particular emphasis on aspects of socialization, life cycle and personality. In the summer of 1955 Freda and Norman Scotch conducted intensive interviewing and testing of 100 Washo informants with a special concern for problems of diet, employment and health. Norman Scotch is a research associate in Anthropology at the Harvard School of Public Health, and Director of the Cross Cultural Disease Survey. John Price's master's thesis, Washo Economy, completed at the University of Utah and based upon field work during the summer of 1961, constitutes the fullest description of Washo economic life undertaken to date. He is now a doctoral candidate and National Science Foundation Fellow at the University of Michigan. James Downs, an assistant professor at the University of Rochester, did his field work among the Washo in the summer of 1959. In addition to the papers offered here, his dissertation, Effect of Animal Husbandry on Two American Indian Tribes: Washo and Navaho, and a monograph, Washo Religion, are valuable new ethnologic sources. Warren d'Azevedo has worked among the Washo intermittently since 1953 with emphasis upon ethnohistory, social organization and Peyotism. The present volume of papers was compiled by him during the fall of 1961 and the spring of 1962 at the University of Utah, and is an expression of the mutual interest of the authors in a collective presentation of their current writings on the Washo.

The authors wish to acknowledge an indebtedness to a number of per-
sons and institutions who have aided their work. Four of the contributors re-
call with gratitude the encouragement given to their first field projects by the
late professors A. L. Kroeber, E. W. Gifford and R. H. Lowie. The atmos-
phere of excitement and dedication these men brought to the tasks of basic
ethnographic research, and their unflagging interest in the cultures of western
North America, were communicated to any student who chose to do field in-
vestigation in this region. Robert F. Heizer and Omer C. Stewart have con- [127]
tinually made the results of their own extensive studies available, and repre-
sent an exemplary tradition of scholarship through their generous sharing of
quantities of unpublished data with serious students. We wish also to thank
Grace Dangberg and Juanita Schubert who, as permanent residents of Carson
Valley in Nevada, have maintained continuing interest in local anthropological
problems and have assisted many of those who came to study there. James W. [127]
Calhoun, Director, and Richard Shutler, Curator, of the Nevada State Museum
in Carson City have made the facilities and collections of this center available
to visiting scholars. The consistent cooperation of the staff of the Carson [122]
Indian Agency at Stewart, Nevada, has also been an important aid to research.

A special note of appreciation is extended to William H. Jacobsen, Jr. [127]
of the University of Washington who has given unstintingly of his time and ex-
pert knowledge of the Washo language. His phonemic system has been used
by most of the contributors to this volume, and his forthcoming dictionary of
the Washo language is eagerly awaited as a much needed reference work. The [122]
editor also wishes to acknowledge the aid of the Bollingen Foundation and the
University of Utah Faculty Research Fund which has done much to facilitate
the presentation of these collected papers.

Finally, we wish to dedicate this volume to the Washo Tribe of California and Nevada, and to all those individuals who have cooperated with us to make our field work among them a rich and rewarding experience. Such experiences are not easily forgotten and will, for many of us, lay the basis of a lifelong friendship and undiminishing concern for the tenacious Washo people.

Warren L. d'Azevedo
University of Pittsburgh
November, 1962.

A RECONSTRUCTION OF ABORIGINAL WASHO SOCIAL ORGANIZATION[1]*

by Stanley A. Freed

The reconstruction of aboriginal Washo social structure presented 601
here is based upon the publications of earlier investigators and upon data that 174
my wife and I collected in the course of about six months' field work in the [127]
summers of 1952, 1953, 1956 and the winter of 1956-57. The major sources
on aboriginal Washo social organization are: Barrett (1917), Curtis (1926), [114]
Kroeber (1907; 1917), Lowie (1939), and Siskin (1941). Our field data consist
principally of interviews with 70 informants who ranged in age from 10 to [113]
over 80. Genealogical data, kinship terminology, census material, and brief
life histories were collected from all informants. The testimony of our older [124]
informants regarding aboriginal conditions and the earlier published reports
almost always agree, and thereby make possible a reconstruction of aboriginal
Washo social organization that is probably relatively sound. The changes in [178]
Washo social structure since aboriginal times will be mentioned here, but a
discussion of the probable causes of these changes has been omitted because [121]
such an analysis has appeared in an earlier paper (Freed, 1960).

In addition to a description of kinship terminology, residence rules, 121
marriage patterns and other customary categories of analysis of social organ- 174
ization, this paper will attempt to describe role behavior among kinsmen in 554
aboriginal times. This description is based on data from role profile tests
taken by 47 Washo in the winter of 1956-57, and therefore pertains to modern 602
role behavior (Freed, 1960, 365-70). The degree to which these patterns of [125]
modern role behavior resemble those of aboriginal times cannot be determined
with any certainty because the published sources contain virtually no informa-
tion on role behavior; also, attempts to elicit statements of aboriginal role
behavior from elderly informants were unproductive. However, it is possible
to make a tentative estimate of the degree to which modern and aboriginal
role behavior resemble each other on the basis of a general appraisal of Washo
acculturation. The Washo are still a recognizable group; they speak their own [147]
language; and, in modified form, they practice a number of aboriginal culture
patterns (Freed, 1960). For these reasons we can assume that role behavior [178]
among the modern Washo gives some indication of aboriginal role behavior.

Kinship Terminology

The kinship terminology of the aboriginal Washo may be established 601
with relative confidence because the terminologies collected by Kroeber (1907; 114
1917) and Lowie (1939) not only agree closely with each other but also with

---

*Notes are at ends of papers.

the terminological system used by the majority of the modern Washo. The 601
terms are listed in Table 1. A diagram of the consanguineal kinship system [114]
is given in Fig. 1. The morphophonemic analysis of the kinship terms in
Table 1 is based on unpublished work made available by Jacobsen. In the [127]
first column, the numbers assigned to each term are the same as the numbers used in Fig. 1; the English translation of the Washo term appears in
the second column; the singular form with the first person possessive prefix is listed in the third column; and the fourth column gives the morpho- [193]
phonemically basic form of the stem. Almost all kinship terms require the use of a possessive prefix, even if the possessor is indicated by a preceding noun or independent pronoun. A hyphen preceding the stem in Table 1 indicates that a possessive prefix is always necessary.

The Washo call all cousins older or younger sibling depending upon whether ego's parent is older or younger than the parent of ego's cousin. Kroeber (1917) states that cousins are called older or younger brother, in accordance with their own ages rather than the ages of their parents. This statement was checked with a number of older informants; they all agreed that the terms used for cousins depend upon the ages of parents and parents' siblings rather than upon the ages of ego and his cousins. Jacobsen (1958) supports our interpretation. There is, however, a tendency on the part of the younger Washo to call their cousins older or younger siblings depending upon their own age and the ages of their cousins rather than upon the ages of the parents. Another tendency among present-day Washo is to make a terminological distinction between siblings and cousins by using for cousins the terms
numbered 12, 13, 14, and 15 in Table 1. Thirteen of our informants made [177]
this distinction for some or all of their cousins. This terminological usage is not confined to the young but occurs among older people as well. However, it appears to be a relatively recent change that stems from acculturation rather than a pre-white usage (Freed, 1960, 369).

In the first ascending generation, there are six distinct terms for father, father's brother, father's sister, mother, mother's brother, and mother's sister. Husbands and wives of aunts and uncles are not considered relatives, a point upon which all our informants were quite definite. According to both Lowie (1939) and Siskin (1941), mother's sister's husband is called by the same term as father's brother and father's brother's wife by the same term as mother's sister. This, however, was true only when two brothers married two sisters, as occasionally happened. Lowie and Siskin may have obtained their information from the descendants of such a marriage. The younger Washo tend to use a single term for mother's brother and father's brother. This usage, however, is not widespread; it occurs only three times in our sample of 70 people.

60

In the first descending generation, there are separate terms for son, daughter, brother's child, and sister's child. The younger Washo tend to classify brother's children and sister's children under a single term, but this is infrequent and occurs only five times in the group of 70 Washo.

Terminological usages between ego and all relatives of the second and third ascending and descending generations are reciprocal. A person calls his father's father dibá·baʔ (my father's father) and this relative calls him lalá·βeʔ (my son's child) which can be approximately translated as "the one whose father's father I am." A single term is used for all relatives of the third ascending generation, and another term derived from the same stem for all relatives of the third descending generation.

The Washo do not have separate terms for reference and address. Kroeber (1907; 1917) and Lowie (1939) report none, and we have found none in our interviewing. Jacobsen, in personal communication, also corroborates this.

The Washo have a set of polite teknonymous terms which they use for most affinal relatives. The list given in Table 2 may not be complete, for we did not investigate all of the logical possibilities. For example, two terms are given for sister's husband (my sister's child's father and my older sister's husband) and only one for brother's wife (my brother's child's mother). The possible descriptive terms, older or younger brother's wife, were not given by our informants, but most probably this is because they simply failed to mention them. Despite the fact that Table 2 is incomplete, the essentials of the system of polite affinal terms are adequately presented.

Table 1

Aboriginal Washo Kinship Terms:

Consanguineal and Affinal Relatives[a]

601
193

Term No.	English	Singular with first person poss. prefix	Stem
Parent and child class			
1.	father	digóyʔ	-gúʔy
2.	mother	dilâʔ	-láʔ
3.	parent	diʔmálu	-ʔmálu
4.	parent	dityé·Lu	-é·Lu
5.	son	diŋá·m	-ŋá·m
6.	daughter	diŋámuʔ	-ŋámuʔ
7.	children	diŋáʔmiŋ	-ŋáʔm̥iŋ
Sibling class			
8.	older brother, half-brother, cousin whose parent is older than ego's	diʔá·tu	-ʔá·tu
9.	older sister, half-sister, cousin whose parent is older than ego's	diʔí·sa	-ʔí·sa
10.	younger brother, half-brother, cousin whose parent is younger than ego's	dibéyu	-béyu
11.	younger sister, half-sister, cousin whose parent is younger than ego's	diwíʼisuk	-wíʼisug
12.	distant male relative or friend (m. sp.)	dikMílu or diMílu	-Mílu
13.	distant female relative or friend (m. sp.)	diʔulišáwlam	-šáwlam

601
193

14.	distant male relative or friend (w. sp.)	diʔulimeṫé·liwiʔ	. . .
15.	distant female relative or friend (w. sp.)	disú·	-sú·

Grandparent and grandchild class

16.	father's father	dibá·baʔ	-bá·baʔ
17.	son's child (m. sp.)	labá·ṗaʔ	-bá·baʔ
18.	mother's father	diʔélel	-ʔélel
19.	daughter's child (m. sp.)	leʔéleliʔ	-ʔélel
20.	father's mother	diʔámaʔ	-ʔámaʔ
21.	son's child (w. sp.)	laʔáʔmaʔ	-ʔámaʔ
22.	mother's mother	digúʔu	-gúʔu
23.	daughter's child (w. sp.)	legúʔyiʔ	-gúʔu
24.	father's mother's sister, mother's mother's sister	dibák̇a	-bák̇a
25.	sister's child's child (w. sp.)	lebák̇ayiʔ	-bák̇a
26.	father's father's sister, mother's father's sister	disámaʔ	-sámaʔ
27.	brother's child's child (w. sp.)	lasáʔmaʔ	-sámaʔ
28.	father's father's brother	disáksak	-sáksag
29.	brother's son's child (m. sp.)	lasáksagiʔ	-sáksag
30.	mother's father's brother	diʔé·bu	-ʔé·bu
31.	brother's daughter's child (m. sp.)	leʔé·ṗuʔ	-ʔé·bu
32.	father's mother's brother, mother's mother's brother	ditóʔo	-tóʔo
33.	sister's child's child (m. sp.)	latóʔyiʔ	-tóʔo

Great-grandparent and great-grandchild class

34.	relative of third ascending generation	diṗísew	-ṗísew
35.	relative of third descending generation	leṗísewi	-ṗísew

601
193

Uncle and nephew class			
36.	father's brother	diʔéwšiʔ	-ʔéwšiʔ
37.	brother's child (m. sp.)	dimáʔsa	-máʔšaʔ
38.	mother's brother	didáʔa	-dáʔa
39.	sister's child	dimá·gu	-má·gu
40.	father's sister	diyá·ʔ	-yá·ʔ
41.	brother's child (w. sp.)	dišémuk	-šémug
42.	mother's sister	dišášaʔ	-šášaʔ
Parent-in-law and child-in-law class			
43.	parent-in-law	láyuk	-áyuk
44.	son-in-law	dibuʔáŋaliʔ	buʔáŋaliʔ
45.	daughter-in-law	léyeš	-lyeš
46.	child's spouse's parents	lámɨk	ámɨg
Sibling-in-law class			
47.	wife's brother	diwlá·dut	-wAlá·dut
48.	husband's brother	dimeʔéwšiʔ	-meʔéwšiʔ
49.	sister's husband	didámaw	-dámaw
50.	brother's wife (m. sp.)	dimašášaʔ	-mašášaʔ
51.	husband's sister, brother's wife (w. sp.)	diyáŋil	-yáŋil
Spouse class			
52.	husband	dibumé·liʔ	bumé·liʔ
53.	husband	diʔmé·š	-ʔmé·š
54.	wife	dimlá·yaʔ	-mlá·yaʔ or -imlá·yaʔ

---

[a] Source: adapted from Freed, 1960, 356-7. .

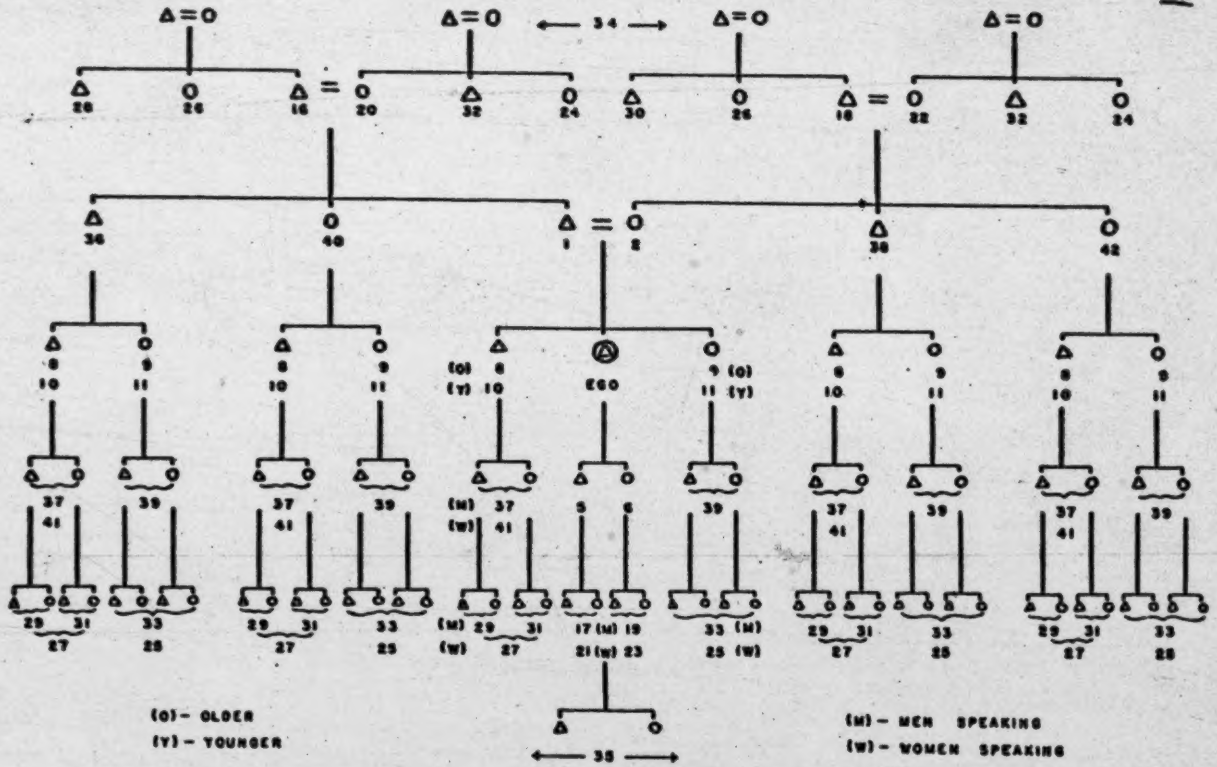

34
28
26
16
20
32
24
30
26
18
22
32
24
36
40
1
2
38
42
8
10
9
11
(O)
(Y)
EGO
37
41
39
(M)
(W)
5
6
29
31
27
33
25
17 (M) 19
21 (W) 23
35
(O) - OLDER
(Y) - YOUNGER
(M) - MEN SPEAKING
(W) - WOMEN SPEAKING

Fig.1. The aboriginal Washo consanguineal kinship system.
Triangles denote males; circles denote females; numbers refer to the terms in Table 1.
Source: Freed, 1960, 357.

Table 2

Aboriginal Washo Kinship Terms:

Polite Affinal Terms[a]

601
195

English	Washo	Literal translation
son-in-law.	leʔéleliʔ dagóyʔ (m. sp.)	daughter's child's father;
	legúʔyiʔ dagóyʔ (w. sp.)	daughter's child's father
daughter-in-law . .	labá·p̓aʔ daláʔ (m. sp.)	son's child's mother;
	legúʔyiʔ daláʔ (w. sp.)	son's child's mother
father-in-law . . .	dibumé·liʔ dagóyʔ (w. sp.)	husband's father
wife's brother. . .	diŋáʔmiŋ dadáʔa	children's mother's brother
husband's brother.	diŋá·m deʔéwšiʔ	son's father's brother
sister's husband. .	dimá·gu dagóyʔ	sister's child's father
	diʔí·sáʔ bumé·liʔ	older sister's husband
brother's wife. . .	dimáš daláʔ (m. sp.)	brother's child's mother
brother's wife. . .	dišémuk daláʔ (w. sp.)	brother's child's mother

---

[a] Source: Freed, 1960, 358.

Residence Rules

Residence rules were established from the published reports, the statements of our older informants referring to aboriginal times, and the census data and brief life histories provided by our group of 70 informants. Lowie reports that residence was matrilocal until the death of the wife's parents, when the couple moved. Another of his informants says that residence following marriage could be either matrilocal or patrilocal with a slight preference for the former (Lowie, 1939, 308). Curtis reports initial matrilocality of a few weeks, after which the couple went to the husband's family. Many couples lived in either place alternately (Curtis, 1926, 97). On the basis of the information given by Lowie and Curtis, Washo residence is therefore bilocal with a tendency toward initial matrilocality. 127 591 [124]

Our informants report three kinds of residence: patrilocal, matrilocal, and neolocal. According to our older informants, no compelling rule governs the choice of residence. Most people spend the greater part of their lives near the parents or other close relatives of the husband or wife; neolocal residence occurs; but is usually of short duration and therefore relatively unimportant. Neolocal residence is reported as frequently by our older informants as by our younger ones, indicating that neolocal residence is not a recent innovation. Our data do not support a tendency toward initial matrilocality. Of 48 marriages reported by our informants, 17 were initially matrilocal. Since only three kinds of residence choices occur, on the basis of chance one-third of them would be matrilocal. The 17 initially matrilocal residence choices that occurred in the sample of 48 marriages do not differ sufficiently from the 16 that would be expected from chance alone to suggest a tendency toward initial matrilocality. 591 124 [114]

It is not entirely clear whether or not data from the modern Washo indicate that changes have occurred in Washo residence patterns since aboriginal times. I believe that none have occurred -- that the apparent differences between the reports of Lowie and Curtis and the data collected by my wife and myself arise from differences in field procedure. Lowie and Curtis interviewed only a few people, whereas we interviewed many. Residence data gathered from a large number of people will show greater variability than the normative statements of a few informants, especially in the absence of a compelling rule. Modern Washo residence is best described as bilocal, and probably no change has occurred since aboriginal times (Freed, 1960, 360-1). 114 591

Descent and Inheritance

Descent is basically bilateral. Because personal property is de- 611
stroyed at death and houses are torn down and abandoned, they cannot be in- 428
herited. Plots of pinenut trees are privately owned and are inherited bilat- 423
erally. The plots are marked by lines of stones. If an individual is discov- [768]
ered gathering in the wrong plot, the owner may take the intruder's pinenuts
and break the implements he used. A person has the right to pick in his [685]
spouse's plot, but this right terminates at the death of the spouse. Barrett
(1917) writes that each village has a hereditary chief, teūbĕ́yū (Barrett's 622
transcription), and that the office passes from father to son. Lowie (1939),
on the other hand, says that one of his informants reported a teūbĕ́yū for all [643]
the Washo; but he comments that this is probably a recent development. His [178]
informants did not know whether the chief inherited from his father. Our in-
formants, as well as Lowie's, mention chiefs (teūbĕ́yū) who, in aboriginal
times, would call people together on ceremonial occasions and address them,
telling them to behave properly. These chiefs had no authority beyond their
ceremonial functions; there is no evidence concerning the possible inheritance
of the office. Special headmen led the communal rabbit, antelope and deer 624
hunts. According to Barrett (1917), the rabbit chief inherits his office, but 224
Lowie (1939) says he is chosen by the people. Two of our informants, Nancy
Emm and Roy James, say the rabbit chief inherited from his father. The [756]
antelope chief is a shaman who dreams the right to his office. Shamans do
not inherit their positions. Any able hunter is the leader of a communal deer
hunt (Barrett, 1917, 9, 12; Lowie, 1939, 303). Inheritance among the modern 611
Washo is bilateral. Family names may be inherited from either the father 428
or mother. Some of the marriages contracted by the younger Washo are of
very brief duration, and in this circumstance the child often takes the family 424
name of the mother. The offspring of more permanent unions take the fa- 551
ther's name. 581

Family, Moiety, and Local Group

The nuclear family was the basic unit of aboriginal Washo social organ- 594
ization. The Washo practiced polygyny and therefore had some polygynous 595
families. Whether the polygynous families ever reached a frequency of 20%, a figure that Murdock (1949, 28) uses to distinguish between societies with polygynous families and those with monogamous families, cannot be determined because polygyny is now prohibited by law and the Washo no longer practice it. According to our informants, the aboriginal Washo family was nuclear; none of the published sources contains contrary evidence. The modern Washo family is nuclear, but it sometimes includes a few other relatives.

The Washo had weak agamous moieties whose only apparent function 616
was to oppose each other in games at the annual pinenut dance (Freed, 1960,
361). Actually, three "moieties" were present, but one of them divided its
members between the other two when participating in games; hence, the system was fundamentually dual. A person belonged to his father's moiety,
which often was also his mother's moiety. When people of different moities
married, they could join whichever moiety they wished. One of our male informants claims that a woman always joined her husband's moiety. Lowie
says that in the hand game, a man could leave his own moiety and join the
opposite moiety if it were having better luck (Lowie, 1939, 304). The moiety [178]
system does not exist today.

Settlements were very small. Lowie (1939, 303) states that the usual 361
settlement had two to four houses, and that no village had as many as 10 [628]
houses. Neighbors were often kinsmen, but they might also be non-relatives.
Modern Washo settlements are much larger than aboriginal ones; the largest, [178]
Dresslerville, Nevada, has a population of approximately 200. [162]

Marriage

Curtis (1926, 97) and Barrett (1917, 9) report that polygyny was formerly practiced. Barrett notes that monogamy was as prevalent as polygyny. 595
Lowie (1939, 309) says that both sororal and nonsororal polygyny existed,
with a tendency to favor the sororal form because the Washo believed that
strange women will fight. Barrett says that a man's choice of subsequent 587
wives was not restricted. Both the sororate and the levirate occurred. Both
were correct but not compulsory, according to Lowie. Curtis states that a
widow had to marry her husband's brother if he desired her. Our informants
support Lowie, both with regard to the preference for sororal as opposed to
nonsororal polygyny and the noncompulsory character of the levirate. Polygyny, the sororate, and the levirate are no longer practiced. Many of the mod- 595
ern Washo contract a series of monogamous marriages with the earlier ones 587
often of short duration and the later ones lasting considerably longer. Some 178
Washo remain with their original marriage partners for life.

Role Behavior

The following descriptions of the role behavior of relatives in ego's 602
generation and the first ascending and descending generations are based on 125
the role profile test. The relatives of the second and third ascending and de- 554
scending generations were not included when the test was given. However, a

brief description of the behavior of relatives separated by two or three generations is included. This is based upon observations and a few rather general statements of informants.

602
125
554

The administration and analysis of the role profile tests and the characteristics of the group of people who took them are described in Freed (1960). The role profile test asks 16 questions probing various features of interpersonal behavior. The questionnaire is given below. All the questions are related to four general qualities of interpersonal interaction: dominance, submission, affiliation and hostility. The strongest and purest expressions of these qualities are in questions one (dominance), five (affiliation), nine (submission), and 13 (hostility). The questions between any two of these attempt to combine their qualities in varying degrees. For example, "to teach" (question two) combines dominance and affiliation; "to respect" (question eight) combines affiliation and submission; "to nag" (question 12) combines submission and hostility; and "to refuse help" (question 15) combines hostility and dominance. The data of the role profile test can be quantified, and this permits an objective description and comparison of roles. The quantitative treatment of roles and their similarities and differences is given in Freed (1960). This paper will describe roles only in qualitative terms.

Questionnaire of the Role Profile Test

(The words in parentheses were useful in improving the informants' understanding of the questions)

1. Which relative most often tries to tell you what to do? Which most often gives you orders (or bosses you)?

2. Which relative most often teaches you how to do something? Which one gives you advice or tells you his opinions?

3. Which relative is most likely to help you if you need it?

4. Which relative is most likely to feel bad and sympathize with you when something goes wrong?

5. Which relative is specially fond of you?

6. Which relative most often cooperates (works together) with you?

125 7. Which relative depends on you most and most often asks your help?

602

554 8. Which relative respects you the most? Which one asks your opinions?

9. Which relative obeys (minds) you if you tell him or her to do something?

10. Which relative is most eager for your approval?

11. Which relative would be the most likely to say or think you did something wrong (or bad)?

12. Which relative nags you most?

13. Which relative disapproves of you and criticizes you most often?

14. Which relative punishes you or gets angry (or mad) if you don't mind or if you do something wrong (or bad)?

15. Which relative is most likely to refuse you help even if you need it pretty badly?

16. Which relative would be most likely not to want to have anything at all to do with you?

125

Father. This is a dominant relative. He rates fairly high in affilia-
157 tion, rather neutral in submission, and generally low in hostility. Despite
554 his low score in hostility, the father is a disciplinarian for both men and wom-
602 en as shown by his high score on question 14 (to punish). Women see him as a mildly suspicious and disapproving figure as shown by a fairly high score on question 11. The role of father differs considerably for men and women in teaching (question 2). A father instructs his sons much more than his daughters.

Father's brother. This role differs markedly for men and women. Father's brother is a much more important relative for men than for women as shown by his higher scores when rated by men on all questions except the last two, which show rejection. The role of father's brother for men is similar to that of father except that father scores significantly higher on the first two questions (to order and to teach). For women, father's brother is an unimportant relative, with low scores on all questions, except the last two.

Father's sister. She is a rather cold and hostile relative for both men and women. She scores high only on hostility (questions 11 to 13) and rejection (questions 15 and 16). She possesses no disciplinary power either for men or women as shown by her low score on question 14 (to punish).

157
125
602
554

Mother. The mother's role is similar to the father's. She scores high in dominance and affiliation. Her score in submission is higher than father's. She scores low in hostility, but, like father, she is a disciplinarian as indicated by her fairly high score on question 14 (to punish). There is no contradiction between a high score in dominance and also a rather high score in submission. This means only that when the mother becomes old she sometimes may be dependent upon her children. Women see their mothers as much more suspicious than do men, as indicated by the mother's significantly higher score on question 11 (to suspect wrongdoing) when rated by women.

Mother's brother. His scores are neutral in dominance and affiliation and low in submission. He is a more suspicious and hostile figure for women than for men, as shown by his high score on questions 11 (to suspect wrongdoing) and 15 (to refuse help) when rated by women. For men, he is an unimportant relative with low or neutral scores on all questions except the last, which shows rejection.

Mother's sister. This relative is a much more dominating figure for women than for men. She is neutral in affiliation for both men and women, scores higher in submission for males, and scores rather high in hostility for both. Noteworthy features of her role are the high score on question 2 (to teach) for women and the rather high score for both men and women on question 13 (to disapprove).

Older brother. The most noteworthy feature of this role is its neutrality. Older brother's scores are neither very high nor very low on any question. His role is very similar for both men and women. The lack of distinctiveness in the role of older brother is probably due to his position as a relative older than ego yet of the same generation. This gives the role of elder brother elements of both superiority and equality which tend to neutralize each other.

Younger brother. The role of younger brother also lacks distinctive features; the reason is probably the same as in the case of older brother: younger brother is younger than ego, but a member of his generation. The roles of older and younger brother differ considerably in dominance; older brother is much more dominating than younger. The role of younger brother is very similar for men and women.

Older sister. The role of older sister is quite different for men and women. For women, she is a dominating, very cooperative, and rather critical relative as shown by her high scores on questions 1 (to order), 2 (to

157
125
602
554

teach), 6 (to cooperate), and 13 (to disapprove). For men, older sister is rather neutral regarding affiliation; she scores somewhat higher on both submission and dominance; and she is a very critical relative, as shown by her high scores on questions 11 (to suspect wrongdoing), 12 (to nag), 13 (to disapprove), 15 (to refuse help), and 16 (to reject).

Younger sister. The role of younger sister is quite similar to that of younger brother. She rates low or neutral in dominance, affiliation and hostility. Her rather high score on question 9 when rated by males shows that she obeys her older brother reasonably well.

Son. Son scores low on dominance and hostility and high on affiliation and submission when rated by men. The role of son is generally the same for women informants, except that son is a somewhat more hostile relative, as shown by his higher scores on questions 12 to 14, when rated by women.

Daughter. For men, daughter scores very low in dominance, neutral in affiliation, and very low in hostility. Her only noticeably high score, when rated by men, is on question 9 (to obey). For women, daughter scores low in dominance, but not nearly as low as she scores for men. Daughter scores higher in affiliation for women than for men, as shown by her higher scores on questions 6 (to cooperate), 7 (to depend), and 8 (to respect). Daughter also scores noticeably higher on question 12 (to nag) for women than for men.

Brother's child. This is a relative with whom there is little interaction either by men or women. Scores are low for almost all questions. Brother's child's highest score is on question 9 (to obey) for men. He ranks very low in dominance, a bit higher in affection, low to neutral in submission, and low in hostility for both men and women.

Sister's child. The role of this relative is very similar to that of brother's child. Her scores are low on all questions. She is a slightly more hostile figure toward men than is brother's child.

[603]
586]

Relatives separated by two or three generations. The outstanding characteristics of behavior between such relatives are affection and the rendering of assistance. We noticed on many occasions that young children take care of their grandparents, especially if the old people are partially incapacitated. Old people are very fond of children. When young married people separate, grandparents sometimes take and rear the children.

128]

The data from the role profile tests can be organized by question as well as by role. That is, the behavior of all relatives on any one question can be considered together rather than the behavior of any one relative on all

125 questions as has been done above. The former kind of analysis facilitates
157 comparisons of all roles on any question. This comparison is given in Freed
(1960, 369-70) and reveals several interesting features of Washo social organ-
554 ization. First, the importance of the nuclear family is clearly shown, espe-
602 cially the father, mother, son and daughter relationships. Second, men co-
[128] operate with men and women with women. Third, although authority in the
society rests in the older people, father's siblings have little authority over
[544] brother's daughters and mother's brother has little over sister's son. Fourth,
the principal hostile relatives for both men and women are older women: fa-
[476] ther's sister, mother's sister, and older sister. Fifth, both patrilineal and
matrilineal relatives seem to have equal importance in Washo social
organization.

121 This paper has presented a reconstruction of aboriginal Washo social
structure and has noted the changes that have taken place since pre-white
128 times. The descriptions of role behavior are based upon data from the mod-
ern Washo, but are thought to give some suggestion of aboriginal Washo role
behavior because the Washo have retained their group identity and practice,
in modified form, a number of aboriginal culture patterns.

Notes

122 1. The field work upon which this paper is based was supported by
a grant from the Department of Anthropology, University of California,
104 Berkeley, to whom my thanks are due. Unless noted otherwise, Washo words
are written in a phonemic system devised for Washo by William H. Jacobsen,
Jr., who did his work under the Survey of California Indian Languages, De-
partment of Linguistics, University of California, Berkeley.

Bibliography

Barrett, Samuel A.
1917 The Washo Indians. *Bulletin of the Public Museum of the City of Milwaukee*, Vol. 2, No. 1, pp. 1-52.

Curtis, Edward S.
1926 *The North American Indian*, Vol. 15. The Plimpton Press, Norwood, Mass.

Freed, Stanley A.
1960 Changing Washo Kinship. *University of California Anthropological Records*, Vol. 14, No. 6, pp. 349-418.

Jacobsen, William H., Jr.
1958 Washo and Karok: An Approach to Comparative Hokan. *International Journal of American Linguistics*, Vol. 24, No. 3, pp. 195-212.

Kroeber, Alfred L.
1907 The Washo Language of East Central California and Nevada. *University of California Publications in American Archaeology and Ethnology*, Vol. 4, No. 5, pp. 251-318.

1917 California Kinship Systems. *University of California Publications in American Archaeology and Ethnology*, Vol. 12, No. 9, pp. 339-96.

Lowie, Robert H.
1939 Ethnographic Notes on the Washo. *University of California Publications in American Archaeology and Ethnology*, Vol. 36, No. 5, pp. 301-352.

Murdock, George P.
1949 *Social Structure*. The Macmillan Co., New York.

Siskin, Edgar E.
1941 *The Impact of the Peyote Cult upon Shamanism among the Washo Indians*. Ph.D. dissertation, Yale University, New Haven.

THE PERSISTENCE OF ABORIGINAL CEREMONIES AMONG THE WASHO INDIANS[1]

by Stanley A. and Ruth S. Freed

In the 1950's the Washo were observing, in modified form, five of 796
their six aboriginal ceremonies. These were the ceremonies at birth, girl's 178
puberty, death, the shaman's curing rite and the annual pinenut dance. The
dance and ceremonies before a war party set out and after its return apparently disappeared shortly after the beginning of permanent white settlement
due to the suppression of warfare by whites.[2] Of the five surviving ceremonies, three were rites of passage regularly observed whenever circumstances
made them appropriate: the ceremonies at birth, girl's puberty and death.
These three ceremonies give every indication of surviving for the foreseeable future. The other two ceremonies, the pinenut dance and the shaman's
curing rite, appear to be on the verge of extinction. The annual pinenut dance
had already essentially disappeared by 1952; and the shaman's curing rite
probably will have disappeared by the early 1960's. This paper will describe [121]
the five ceremonies that have survived into the 1950's and will discuss possible reasons why three seem capable of survival while two are on the point
of disappearance.

The descriptions of aboriginal Washo ceremonies are reconstructions 174
based on the testimony of our informants and on earlier published reports. 124
Hank Pete claimed he was born in 1882; Bertha Holbrook said her year of
birth was 1885. Nancy Emm did not give her age but she appeared to be as 796
old as Holbrook. Mooney (1928, 20) considers 1845 as the end of the aboriginal period in the region; the first permanent white settlement was in 1851. 127
This means that when our informants were children some Washo were still
living who were familiar with the relatively undisturbed Washo culture. Hank
Pete's grandmother was alive when he was a boy, and he apparently learned
a good deal from her. The most useful sources on aboriginal Washo ceremonies are Curtis (1926), Lowie (1939), and Stewart (1941). Cartwright (1953)
has described a modern girl's puberty dance; Freed and Freed (1963) have described the shaman's curing rite.

The Washo may have had an annual mourning ceremony but the evi- 769
dence for its existence is scanty. Barrett (1917, 9) states "... there is an 114
annual mourning ceremony, or 'cry,' accompanied by a big feast." He gives
no further details. Curtis (1926, 97) reports "Annually there was a memorial ceremony which appears to have closely paralleled the California rite.
Objects were burned while the people wailed, and a feast was provided by
the chief. Effigies of the lamented dead are said to have been burned, as in

1 2 [footnotes appear on p. 39 -- Analyst]

769 southern California; but since the statement came in answer to direct inquiry
114 and no further details were forthcoming, its truth cannot be accepted without further evidence." None of the other investigators among the Washo has found evidence of an annual mourning ceremony. Our informants did not report it.

Birth Ceremonies

843

844 Women were active during pregnancy and there were no special observances before birth. When the baby was born, it was bathed, wrapped with its arms at its sides, and placed in a winnowing basket (modal). Bertha Holbrook
[854] says that the baby was not bathed again until the umbilical cord fell off. *Stewart (1941, 408) says the baby was bathed about every five days and placed*
846 in a new basket after each bath. The afterbirth was arranged with the umbil-
844 ical cord inside and buried upright. Stewart (1941, 408) says the afterbirth was wrapped in bark before burial. The Washo believed that if the afterbirth
[812] was buried upside down the woman would have no more children. The baby's umbilical cord was kept moistened and was wrapped with ground pinenut bark.
[828] When it fell off it was tied to a stick and this in turn was tied to the right side of the winnowing basket. The Washo believed that this would make the baby right-handed.

846 The husband went to a stream and bathed after the birth. He left a
[431] present beside the stream which anyone could come and take. Lowie (1939, 305) reports that after the birth the husband gave some man a buckskin, which
[751] helped to keep disease away from the infant. Until the cord fell off, the husband took a cold bath every morning; was not supposed to sleep at night; ate
[461] no meat, salt or grease; did not gamble or smoke (Stewart, 1941, 409); and was constantly working. The husband's incessant activity was to make the child industrious in later life. When the cord fell off, the mother announced
[431] it. Then the husband went hunting, killed some animal, and distributed it in his household. On this day any nonrelative could come and help himself to the property of the husband. After the cord had fallen off, the husband returned to normal life and could again eat meat, salt and grease.

[834] For a month after the birth, the mother did not bathe; ate no meat, grease, or salt; drank only warm water; used a scratching stick (Stewart, 1941, 408); and she and her husband had no sexual intercourse. Stewart (1941, 409) says the couple was continent for from six to 12 months. For two
[514] weeks the mother lay tightly covered upon a warm bed. The bed was made by digging a shallow ditch, putting hot sand and ashes in it, and covering it with grass. She did not leave the house during this time, even to relieve herself. The Washo believed that the woman had to be cured inside after a birth and that the hot bed and food taboos aided in draining out the bad blood.

846
852
302

A month after the birth the ceremony the Washo call in English the "baby feast" was held. In Washo the ceremony is called gumgáwi? or gumgá?au and means haircut. The mother bathed herself and the baby and both had their hair cut. Hank Pete says that another woman bathed the mother by washing her with sagebrush leaves dipped in water. The woman stroked the mother from her head down the front of her body to her toes and from the top of her head across her shoulders and down her arms. The hair cut from the baby's head was wrapped in buckskin and tied to the hood of his first cradle basket. Until the haircut the baby was kept in a winnowing basket, but afterwards he was kept on a series of cradle baskets. Next, a female relative of the mother took a winnowing basket (modal) and placed in it small handfuls of all kinds of food. A bow and arrow or an eagle feather or anything else could be placed on the basket with the food. The mother took a bit of each food, chewed it with sagebrush and spit it out. Then the contents of the basket were given away, chiefly to old people. After this ceremony the mother could again eat meat, grease and salt, and the husband and wife could have sexual intercourse.

According to our informants, the modern Washo observe a birth ceremony *although many of the customs surrounding birth* have been abandoned. The men especially seem to have given up their traditional practices; as a result, the ceremony when the umbilical cord falls off is no longer observed. The women still observe the food taboos, unless they have been forced to eat meat at the government hospital. If the food restrictions have been followed, the women undergo the ceremony of chewing food with sagebrush and spitting it out at the end of the period of restriction. Bathing, hair cutting and the distribution of presents have also been retained. The latter practice seems more important in the modern ceremony than it was in the aboriginal one. The modern baby feast follows the birth by two weeks rather than a month. 846 178 852 [302] [431]

Girl's Puberty Dance

The girl's puberty dance (ie?wé we?) was celebrated at her first menses. 881 From the time a girl first menstruated, she did not eat for four days although she might take warm water or tea made from boiling sagebrush or sugar pine leaves in water. The fast made her live longer and kept her from getting hungry later in life; if she ate she would not grow properly and would die young (Lowie, 1939, 306). During the four days of her fast, said the Washo, the girl was "shaping her life." She should work hard so as not to be [461] lazy in the future. The girl tried to stay awake at night, kept busy with household tasks, and gathered berries and nuts. Anyone could take what she had gathered. Stewart (1941, 410) says she used a scratching stick for a month

881
[777] and did not comb her hair. Lowie (1939, 308) says she lay on warm ashes contained in a pit. The girl was not secluded, but men could not touch her
[224] clothes or approach her before the puberty dance, for this would cause them bad luck in hunting.

[535] On the fourth night of the menses, the girl's parents invited their
[574] friends and relatives to a dance to be given for the girl. The mother or another female relative, such as a grandmother or a great aunt, was the sponsor of the dance. The girl opened the ceremony by climbing to the top of a mountain accompanied by a relative or friend who was a girl and a male non-
[787] relative. The girl carried live coals and a long light pole painted red. With the coals the girl lit four fires on top of the mountain. If the smoke from the fires rose straight into the air, it was thought a good omen and the girl would
881 live a long life. If the smoke hugged the ground, the omen was bad. The char-
778 acteristics of the pole the girl carried and its fate after the puberty dance
[856] were thought to have an effect upon the girl. The lightness of the pole made the girl lively. After the dance the girl's father carried the pole high into the mountains and placed it where it would remain upright and not be destroyed by fire. This placing of the pole helped the girl's legs remain strong when
[824] climbing mountains in later life. Both Holbrook and Curtis (1926, 98) say the girl's pole was of elder and Cartwright (1955, 137) says it was of tamarack.

881 After the girl had finished lighting the four fires, she raced the non-
[526] relative back to the foot of the mountain. If she stumbled and showed signs of losing, her relative snatched the pole from her hands and won the race for her. The girl had to win, either herself or by proxy, because if she did not, everything she had built for her future during her four days of fasting would be lost.

881 After the race the dancing began. The girl planted her pole in the
535 ground and danced near it. The dance was a sort of shuffling step, the left foot being slightly raised and moved and the right foot dragged along. An
[778] attendant danced with the girl. The attendant was a young female relative who was provided with a pole similar to the girl's except that it was unpainted. The attendant also planted her pole in the ground and the two girls danced between them. The duty of the attendant was to support the girl if she showed
[533] signs of weakness. The girl's sponsor stood behind the girl as she danced; the attendant's mother stood behind the attendant. Men and women sang songs composed of meaningless words during the dancing. After a time other women joined in the dance and formed a circle. Then the men joined the dance clustering together in one part of the circle (Lowie, 1939, 308). The dancing continued until dawn.

881
302

At sunrise the girl was brought before the crowd and stripped to her apron. She stood in a large basket. The girl's sponsor painted her with ashes using sagebrush for a brush. One streak was made on the face from the middle of the hairline vertically downward to the chin. Other streaks were from the shoulders down each arm and from the shoulders down the front of the body and down each leg. As the woman painted the girl, she talked to her and gave [868] her good advice: "Be lively; don't be lazy; don't eat meat, fat, or salt during your menses; wash your face gently at this time or you'll have wrinkles." [777] After the painting with ashes, the woman poured a basket of water over the girl and threw the empty basket into the crowd where the women scrambled for it because it was considered lucky. The basket upon which the girl had been standing was also thrown into the crowd. The girl was then taken inside and her face and shoulders were painted red; then she dressed.

Following the dancing, the men took the girl's pole high into the mountains and hid it. No harm should come to it, for the pole represented the girl. 881 [778] If someone found and broke it, the girl would be bent over for life. After the men had taken away the pole, the girl broke her fast. She was given a little [262] pinenut and meat mixed with sagebrush which she chewed and then spit out. The girl was still forbidden meat, fish, grease and salt for the rest of the month, but she could now eat anything else. A feast for all the participants and spectators concluded the ceremony. When restrictions on meat, grease, fish and salt were finally lifted, the girl again went through the ceremony of chewing food and spitting it out, and she also had her hair cut and was given a bath. According to our informants, the entire ceremony was repeated on the occasion of the girl's second menses.

The girl's puberty dance is held today and shows no signs of disappearing. 881 778 In the course of our field work, we collected brief life histories of a page or less from 38 females from 10 to 80 years of age. These showed that almost all the women for whom we have information had their puberty dance. Table 1 summarizes the occurrence of the girl's puberty dance by age among our 38 informants. Four of the five females who had no dance gave a reason for its omission. One girl had not yet reached puberty. One of the women in the 40-49 age group had no dance because her father had died just before her menses and the family felt too unhappy to give a dance. The other woman in the 40-49 age group said her mother was a Paiute and therefore was not interested in giving her a dance. However, the daughters of this woman were given dances with their father's elder sister acting as sponsor. The woman in the 70-79 age group had no dance because her mother was dead and she had been in boarding school at the time of her first menses. The woman in the 20-29 age group who had no dance gave no reason but remarked that she had observed the prohibitions against eating meat, fat and salt. Particularly indicative of the vitality of the puberty dance is the fact that all the girls in the

881
179

10 to 19 age group who had attained the menarche had been given a dance. In addition, several mothers with girls between the ages of 11 and 13 told us they planned to give their daughters a dance when they came of age.

Table 1

Occurrence of Girl's Puberty Dance among
38 Washo Women by Age

Age Group	Number	Given Dance	No Dance	No Information
10-19	9	8	1	
20-29	7	3	1	3
30-39	3	2		1
40-49	8	4	2	2
50-59	4	3		1
60-69	2	2		
70-79	3	1	1	1
80-89	2			2
TOTAL	38	23	5	10

The modern girl's puberty dance closely resembles the aboriginal rite. All of the basic elements have been retained: the beliefs that the girl is shaping her future life and that she is supernaturally potent and must not touch men; the four days of fasting; the constant activity; the prohibition on eating meat, grease or salt; the climbing of the mountain and the building of the fires; the symbolism of the pole; the ceremonial race; the dance; the painting; the bathing; the giving away of baskets; and the feasting.

The changes appear relatively minor. The girl no longer climbs a mountain to build the fires but rather a small hill barren of trees. The Washo say that this is because of the danger of starting a forest fire on the heavily wooded mountains. After the race to the bottom of the hill, the girl is met by a relative in an automobile and is driven to the dancing area. Sometimes food is served at midnight as well as at the conclusion of the dancing at dawn; and some of the people drink alcoholic beverages during the dancing. The girl is bathed in her slip or in her brassiere and panties rather than in the aboriginal apron. Rabbit and deer meat are served if available, but hamburger is substituted if they are not. The prohibition against meat, grease and salt is maintained for only two weeks instead of a month. The scratching stick and the prohibitions against the girl's combing her hair and eating fish seem to have been abandoned. Cartwright (1955, 140) states that the painting ceremony ends with the girl's running to the nearest river and washing the paint from her body. 881 178 [262]

In the modern ceremony, more emphasis seems to be placed upon the giving of gifts than in the aboriginal one. Other presents in addition to baskets are thrown into the crowd after the dance. Cartwright reports that $75.00 worth of gifts was given away at a puberty dance held for a girl's second menses in either 1929 or 1930. The Washo are not well-to-do and the expense of the puberty ceremony may be one of the reasons the second dance is rarely held. Only a few of the 28 women who had dances reported being given a second dance. [431] [511]

The survival of the dance is probably partly due to the associations the women have attached to it. The older women look back upon the occasion with fondness, and many of these women have sponsored dances for their daughters and granddaughters. The younger women do not always regard the dance as a pleasant occasion. One girl of 16 said she didn't want her dance. "The boys wouldn't talk to the girl before the dance, and I couldn't dance with the boys or touch them." Another young girl said that she was embarrassed "because in the morning at sunrise, I was bathed before everyone wearing only a slip and panties." The girl added, however, that her family invited many friends and relatives and while she was embarrassed at the bathing, she enjoyed having a large party given for her. Another young girl mentioned the big party at her dance. A woman of 27 didn't like the dance because of the bathing in her underslip.

The taboos are a feature of the dance that do not appeal to the young women. One girl did not keep the taboos during her first menses and said, with reference to her dance, "They call it a dance for the girl. I had it in Dresslerville in the summer. I didn't care for it, but every girl goes through it. They make you go without eating except for tea and water. Then at the

881
178
dance they mix food with sagebrush and you spit it out. You wear a slip and they dump water on you early in the morning." Her mother talked to her about the dance and said they have it because the Indians always had it.

In summary, the women under 30 mentioned the embarrassment of bathing and the taboos as unpleasant; but they enjoyed the prestige of a big party. Another unpleasant feature mentioned by Holbrook was the teasing the girls undergo at school, for their fasting and the preparations for the dance announce their condition to all. However, the youngsters themselves made no mention of this. The women 30 and over referred to the dance as a pleasant occurrence in their lives and as an event that was expected in the life of every girl. It seems likely that a woman's memories of the dance become more pleasant as she grows older. Since it is the older women who sponsor the puberty dance, its survival seems assured for the immediate future.

Ceremonies at Death

764
Funeral rites were not elaborate. The dead were formerly cremated, according to Curtis, Barrett and Lowie. When Lowie and Barrett studied the Washo, burial had replaced cremation. Stewart's informants reported only burial. Hank Pete volunteered the information that the dead were never cremated, but we believe this indicates only that the early settlers and missionaries had frowned so severely on cremation that the Washo had abandoned it and were reluctant to talk about it. At the funeral an old person of either sex stepped forward and made a speech instructing the ghost of the dead to stay away and not bother the living. The relatives cried and wailed continually and were joined in this lamenting by other spectators. Holbrook considers the amount of crying in Washo funerals quite noteworthy, apparently in contrast to white funerals. Lowie (1939, 310) says that the corpse was cremated on a 765 pile of sagebrush with the mourners crying and dancing around the fire. The bones were picked up and put in a creek. The mourners cried continually for three months and did not wash their faces for a year. One of Lowie's informants said there was no hair cutting and another said that old people cut their hair as close as possible. Stewart reports that the mourners didn't wash, abstained from gambling, cut their hair, and didn't remarry for one year. 764 The period of mourning terminated with a bath. Lowie says that the house of [768] the deceased was abandoned, some of his property hidden, and some burned with him. Curtis (1926, 97) says the deceased was cremated by burning his house.

764
178
[768]
The modern Washo bury their dead. The mourners cry and wail as formerly, and an old person still makes a funeral speech. The personal property of the deceased is buried with him and his house is abandoned. The

The 764
funeral speech, the destruction of property, and the abandonment of the house 178
are all connected with a belief in ghosts who can cause sickness for their liv- 768
ing relatives. Property is the "road" by which the ghost can return from the 775
land of the dead. Its destruction prevents the return of the ghost (Freed and [783]
Freed, 1963). Houses are not destroyed for they are too valuable, but they are
abandoned for a time and purified by smoking with sagebrush before reoccu- [824]
pancy. We did not observe any hair cutting for funerals. Holbrook says that 765
the first thing people must do on returning to their homes from a funeral is
to wash their faces. Thus it is doubtful if the year's prohibition on washing 178
the face is still maintained, but we have no testimony on this point with regard [302]
to mourners. The name of the dead is permanently taboo, as it was formerly.
The modern Washo funeral often takes place immediately after a Baptist serv- [551]
ice held by a white missionary in the Dresslerville church.

764
178
797

The Shaman's Curing Rite

The Shaman's curing rite is described in some detail in Freed and 755
Freed (1963) and so only a summary will be given here. The shaman cured dis-
eases by means of supernatural power. If the disease was caused by a ghost, [775]
the shaman identified the ghost and the property it had traveled on. He then
told the patient either to get rid of the property or to treat it properly. If the [753]
disease was due to the intrusion of a foreign body into the victim either through [754]
sorcery or because the victim had mistreated food such as pinenuts, the shaman
sucked out the object causing the disease. The shaman used a variety of im-
plements in his curing, some of which represented the sources of his power.
A tubular bone pipe, tobacco, and a cocoon rattle were used by all shamans. [756]
The eagle feather was frequently used, for the eagle was a potent source of
power for many shamans.

The curing ceremony was held each night for four nights in the home of
the patient before a crowd of spectators. The shaman prayed to his power,
sang songs received from it, smoked and blew smoke on the patient, shook his
rattle and walked about. He alternated these activities until about midnight on
the first three nights of the ceremony and continued until dawn on the fourth
night. On the morning after the fourth night everyone took a bath to conclude
the ceremony. At some time during the ceremony the shaman had a vision [787]
that told him whether or not the cure would be successful.

The modern curing rite is apparently similar in all its essentials to 755
the aboriginal one. Minor changes have occurred. Cigarettes are used in- 178
stead of a tubular stone pipe; the ceremony is sometimes shortened to two
nights; and the shaman no longer goes into a trance, vomits out the disease
object, paints the patient, or brushes away the disease as reported by Stewart
(1941, 413-14).

755
178 (1941, 413-14). Although the rite itself has changed but slightly since white
756 contact and the shaman is a respected figure and widely patronized, the
shaman's curing rite is on the point of disappearance because the shamans
themselves are dying out. Only one remains and he was born in 1885.[3]

The Pinenut Dance

527
791 One special man, says Hank Pete, dreamed about pinenuts and prayed
824 for them. He was not a shaman but he had power (see Freed and Freed, 1963).
222 He prayed that the pinenuts increase in number and not be full of worms. This
[787] man was the leader of the pinenut dance and was the person who decided whether the pinenuts were ready for picking. If people were to pick the pinenuts
[782] without the leader's consent, says Pete, the nuts would be wormy and rotten.

[535] Pinenuts were probably the most important single food of the Washo.
222 The pinenut dance (gumsabŭ́ʔai) was held in the fall of the year before the
824 pinenut harvest. The leader called the people together in Double Springs Flat
527 by sending around a knotted cord. The knots represented the number of days
remaining before the ceremony was to begin. The messenger untied a knot
[791] every day as he traveled about calling people. As the people assembled, the
[262] leader of the communal rabbit hunt gathered as many people as possible for a
[211] large rabbit drive, and outstanding hunters would organize communal deer
hunts. The hunting drives lasted four days after which the Washo began the
[624] pinenut dance.

526 The pinenut dance lasted four nights. Each morning everyone had to
527 take a bath. During the day the Washo engaged in a variety of games and
[515] races, all accompanied by heavy gambling. People of different moieties opposed each other in the games. The most popular games were men's football,
[525] a ball race, foot races, archery contests, the hand game and women's shinny.
[616] Usually teams from the different moieties played each other in all the games.

Men's football was played on a field with goals at either end. The object was to kick a small buckskin ball between the two sticks forming the goal. Five or six men played on a side. The game began with the throwing of the ball between the two teams in the middle of the field. Wrestling was allowed in the football game. One goal won the game.

The ball race was also played by men. Two teams arranged themselves in straight lines at right angles to a line between the paired sticks forming the goal. Each team had a ball which at the start of the game was in the possession of the team member at the end of the line farthest from the goal. The

object was to kick the ball from man to man down the line and through the goal. 526
The first team to kick its ball through the goal won the game. Stewart (1941, 527
395-6) says the Washo did not have the ball race.

The foot races of both the men and women began with a challenge. One 526
moiety challenged the other by individual members running to the center of the 527
camp circle, depositing bets which were tied onto sticks, and retiring. Peo- 516
ple then dashed from the other moiety, which was camped on the other side of
the camp circle, and called the bets in the same way. All of the betting was
man to man. The identities of the runners were kept secret until the race be- [754]
gan because shamans might have attempted some sorcery against a contestant.
The race was to a halfway point and return and usually took several hours.
Runners adorned themselves for the race: Indians of the East moiety painted [302]
white marks on their bodies and wore an eagle feather; those of the West moiety painted red marks (Freed, 1960, 361). The winner of the race was bathed by a female relative, and the basket was thrown into the crowd just as at the girl's puberty dance. Also, anyone from the losing side could come and take the clothes the winner had been wearing.

Archery contests began with a challenge. The targets were two round 526
sticks about 4 ft. high set at opposite ends of the course. Four men com- 527
peted, two on a side. At each end of the course stood a member of each team. These two men shot three arrows apiece at the opposite goal. A hit scored four points; an arrow placed nearer the goal than any of the opponents' arrows counted one point. Eight or 10 points won the game.

The hand game was played by men and women. The game was played 524
with four bones, two of which had black wrappings around them, and 10 tally 527
sticks. The tally sticks were divided five to a side. Two men from one side hid a bone in each of their hands. A person from the other side who had the reputation of being a good gambler tried to guess the location of the bones marked with the black wrappings. The side hiding the bones scored a point if the man guessed incorrectly. Only the team in possession of the bones could score points. The game ended when one side had captured all of the tally sticks. The side with the bones sang, and the men hiding the bones sometimes played tricks such as putting both bones in the same hand to confuse and rattle the guesser.

A similar game was played by old men. They used four long sticks, [887]
two of which were wrapped as in the hand game. The sticks were hidden be-
hind a winnowing basket, and eight tally sticks were used. The mechanics [014]
of guessing and scoring were the same as in the hand game. Stewart (1941) says the Washo did not have the hand game, but notes the presence of the game played with the winnowing basket.

526 527 [525] Women played shinny on a field from 50 to 100 yds. long with circular goals about 7 ft. in dia. drawn at each end. Betting was carried on as in men's football. Each player had a stick with which to propel a braided rope of deer hide toward the goal. The game began with the braided piece of hide thrown between the teams in the middle of the field. The women tried to knock the rope into their goals with the sticks. The rope could not be stepped on or picked up with the hand. Four to seven women played on a side. One point won the game.

527 535 [412] [415] [252] [782] [515] [222] [782] The dancing took place in the evenings. Both men and women danced and sang, carrying the tools they used to gather and prepare the pinenuts: the burden baskets, hooked poles for drawing the cones closer, straight poles for knocking down the cones, manos and metates for grinding the nuts to flour, and the paddles for stirring the mush. The dance step differed from the step used in the girl's puberty dance. Holbrook describes it as crossing the right foot over the left and then sort of a hop. People danced clockwise in a circle. During the dancing, the leader moved about talking and praying for pinenuts and all other Indian foods. The leader told people to be good, to treat children and old people with kindness, and to be good to their wives (Curtis, 1926, 95; Lowie, 1939, 303). On the fourth night, women laid out pinenuts and all other food and prayed over it. After the dancing on the fourth night, the people bathed and scattered to their pinenut plots to harvest the crop. When a family had piled up the first batch of the new crop for cooking, a woman threw some small stones over the pile of cooking pinenuts and prayed that the crop be good and not make people sick.

527 178 [535] Our statement that the pinenut dance was still being observed by the modern Washo in the 1950's refers to an attempt to give the dance in the fall of 1952. Apparently the dance had not been given for a number of years prior to this and had all but disappeared. The attempted revival was described by the Washo as very disappointing. It was held in Dresslerville rather than in Double Springs Flat. The man who tried to function as the leader was old, almost blind, and apparently lacked the necessary personal characteristics to fill the office; he also got drunk during the evening, as did several others. The older people danced the traditional dance, but the younger ones had some records and a record player and had a modern social dance inside one of the houses.

[222] [262] People still go to the hills in family units to gather pinenuts; although pinenuts are no longer a staple, they remain an important food for many families. The attempted revival indicates an interest in the pinenut ceremony, but no one seems able or willing to arrange the dance. Its revival in 1952 will probably be one of the last attempts at holding an annual pinenut dance.

Analysis

178 One factor common to those ceremonies on the verge of disappearance
and lacking in the ones likely to survive is the need of a specialist. A shaman
755 is necessary for the curing ceremony. A shaman achieves his position through
756 a supernatural experience and a period of training under an established shaman
(Freed and Freed, 1963). His role is probably the most specialized among the
[177] Washo. The shaman's curing rite has survived into the 1950's in relatively
unchanged form despite the presence of two competing methods of curing illness: modern western medicine and the Peyote Cult. Yet the rite appears
headed for sudden disappearance because the shaman himself is disappearing.

178 The leader of the pinenut dance was a specialist who achieved his position through personality traits and force of character which commanded re-
527 spect. The last leader of the pinenut dance died years ago and the recent re-
791 vival of the dance was a very attenuated version of the aboriginal ceremony.
Pinenuts are no longer a staple food for the Washo. Many people earn their
[262] livings entirely by wage work and buy all their food. Yet some people still go
to the hills for the pinenut season, and the attempted revival of the dance indicates an interest in it. But the dance is gone, and a prominent factor in its
disappearance seems to be that no leader of the aboriginal type is alive to
organize the ceremony.

178 The surviving ceremonies, on the other hand, require no specialists.
The girl's puberty dance has not changed greatly from aboriginal times, and
881 the changes are generally modifications of traditional practices. Any woman
can sponsor a dance. Thus the ceremony is not threatened with sudden dis-
[177] appearance as is the shaman's curing rite. A factor that may have an effect
upon the persistence of the girl's puberty dance is that no ceremonies of
American culture are in competition with it. However, the effects of compet-
177 ing cultural patterns are not clear. No competition exists for the pinenut
178 dance, yet it has effectively disappeared. Competing ceremonies are present
for birth and death ceremonies, yet these are still practiced. The shaman's
curing rite has two competing ceremonies, but it remains relatively unaffected pending the death of the remaining shaman.[3]

178 The ceremonies at birth and death require no specialists. The ceremonies at birth have perhaps changed more than either the girl's puberty dance or death ceremonies, but they are still observed. The greatest changes have been the complete abandonment of the traditional male observances. The old person who makes a speech at the funeral can be anyone, male or female. He does not organize the funeral; his role is ended in a few minutes and requires no special personality characteristics.

[3] [Footnote appears on p. 39 -- Analyst]

178
562 The apparent relationship between specialists and the disappearance of Washo ceremonies focuses attention upon men, for men were usually the specialists in Washo society. Washo specialists were few, but almost all were men. The leaders of communal deer, rabbit and antelope hunts were men, as [756] were the leaders of war parties. The leader of the pinenut dance was a man. Shamans could be either men or women, but male shamans were probably more common. The two shamans practicing in the early 1950's were both men, and most of the shamans of former days mentioned by informants were men.

Modern conditions have affected the male role more than the female. Cooking and the care of babies, for example, retain their importance while hunting, fishing, and warfare have disappeared or have been considerably [177] reduced in importance. Men have of necessity taken to wage work. As a result the overwhelming power and authority of the larger society impinge more on men than on women and seem to have had the effect of undermining male [554] self-confidence. All specialist roles in Washo society were achieved rather than ascribed and a person attained office through a combination of skill and personality traits. But males may have become reluctant to try to achieve such statuses, knowing the prevailing attitudes of the larger society toward Washo culture. (Compare with Freed, 1960, 370, and Freed and Freed, 1963.)

Women seem better adjusted to modern conditions than men. They are less exposed to the larger society, and much of their interaction is with relatives where they feel sure of themselves. Two of the three surviving Washo ceremonies are life cycle ceremonies, which a woman arranges. No special personality attributes are required and the necessary arrangements involve mainly relatives.

Conclusion

128
105 This paper has described the ceremonies of the Washo and has suggested a reason why some appear on the point of disappearing while others seem capable of surviving, at least for the immediate future. One factor that may be important is the vulnerability of the aboriginal specialist under modern conditions. Therefore, ceremonies dependent upon specialists can disappear suddenly when specialists are no longer available. The surviving ceremonies, all life cycle ceremonies, require no specialists. Most Washo specialists were men, and the vulnerability of the specialists is in accord with the more disruptive effects of the larger society upon men than upon women.

These conclusions are highly tentative because of the few ceremonies involved in the analysis. They are only suggestions about possibly significant factors in Washo acculturation, and their validity will be determined by examining the course of acculturation in other simple hunting-gathering tribes of western North America. 128 105

Notes

1. This paper is based upon data collected during about six months of field work in the summers of 1952, 1953, 1956, and part of the winter of 1956-57. Our principal informants were Nancy Emm, Bertha Holbrook, and Hank Pete of Dresslerville, Nevada. We wish to thank the Department of Anthropology, University of California, Berkeley, for financial assistance. 114 115 122

2. For a brief description of the war dances see Lowie, 1939, 329-30, and Freed, 1960, 353. 113

3. Since we made our last field trip to the Washo Indians in 1956-57, we have learned that this shaman has died. 114 756

Bibliography

113

Barrett, Samuel A.
1917 The Washo Indians. Bulletin of the Public Museum of the City of Milwaukee, Vol. 2, No. 1, pp. 1-52.

Cartwright, Willena D.
1955 A Washo Girl's Puberty Ceremony. Proceedings of the Thirtieth International Congress of Americanists, pp. 136-42.

Curtis, Edward S.
1926 The North American Indian, Vol. 15. The Plimpton Press, Norwood, Mass.

Freed, Stanley A.
1960 Changing Washo Kinship. University of California Anthropological Records, Vol. 14, No. 6, pp. 349-418.

Freed, Stanley A., and Ruth S. Freed
1963 A Configuration of Aboriginal Washo Culture. (In this volume)

Lowie, Robert H.
1939 Ethnographic Notes on the Washo. University of California Publications in American Archaeology and Ethnology, Vol. 36, No. 5, pp. 301-52.

Mooney, James
1928 The Aboriginal Population of America North of Mexico. Smithsonian Miscellaneous Collections, Vol. 80, No. 7.

Stewart, Omer C.
1941 Culture Element Distributions: XIV, Northern Paiute. University of California Anthropological Records, Vol. 4, No. 3, pp. 361-446.

A CONFIGURATION OF ABORIGINAL WASHO CULTURE[1]

by Stanley A. and Ruth S. Freed

Beliefs in supernatural power (wegeléyu) and in ghosts are two elements 778
that occur in several patterns of aboriginal Washo culture. These two beliefs 775
are prominent in culture patterns concerned with the etiology and cure of diseases; they also occur in war, social control, funerals, child rearing and
hunting. Ghosts and supernatural power are usually associated with the psychological condition of fear. Because these culture elements are widely distributed among the patterns of Washo culture, they function as a unifying or [182]
integrating force. Such relationships among culture patterns arising from the presence of common elements Nadel calls "logical consistency" (Nadel, 1951, 258-65).

If a cultural configuration is defined as a statement of a cultural regularity, usually with accompanying psychological states taken into account, 121 778
which serves to integrate many of the culture patterns of a society, then fear 775
of supernatural power and ghosts is a configuration of Washo culture. Because the individual Washo can manipulate power, and to some extent ghosts, for either good or evil, the fear of supernatural power and ghosts is often a fear of people who are known to have, or suspected of having, power; therefore, the configuration, fear of supernatural power and ghosts, is often equivalent to a fear of people.

This paper will describe the characteristics of supernatural power and 121
ghosts in Washo culture; it will analyze the functions of these two elements in all culture patterns where they occur, thereby showing that they give logical consistency to Washo culture; and it will indicate how recognition of the configuration, fear of supernatural power and ghosts, helps to explain features of Washo behavior the reasons for which are not otherwise easily perceived.

The Washo culture here described is a reconstruction of aboriginal 124
conditions. It is based primarily upon the statements of elderly people whom 174
we consider reliable informants. Their testimony is usually internally consistent; [171]
they generally agree with each other; and their descriptions of Washo culture patterns closely resemble those of neighboring tribes which are also thought to be aboriginal (see especially Park, 1938, and Whiting, 1950).
Bertha Holbrook and Henry Rupert claim to have been born in 1885 and Hank 115
Pete in 1882; Nancy Emm did not give her age but looked as old as Holbrook. Mooney (1928, 20) considers 1845 to mark the end of the aboriginal period in the region. This means that when Emm, Holbrook, Rupert, and Pete were children, some Washo who were still living were familiar with the relatively undisturbed Washo culture.

[1] [footnote appears on p. 54 --Analyst]

~~600~~
128 undisturbed Washo culture. Some of the descriptions in this paper refer to recent happenings; these are presented as generally illustrative of aboriginal Washo culture because they are so regarded by our informants.

I

778 776 82 Supernatural power can come from the deer, rattlesnake, water, "water-baby" (a small, white, manlike creature that lives in streams, springs and lakes), bear and eagle. One informant (Hank Pete) also mentioned the weasel, a black spider, lizard, magpie, storm and any kind of snake. Another informant (Henry Rupert) mentioned blood. Rattlesnake, water-baby and eagle are considered particularly powerful. Power is cumulative: several relatively weak powers can be combined to overcome a power stronger than any of them alone. The Washo call both the sources of power and the power itself wegeléyu, and the term also denotes the implements used by a shaman in the curing ceremony.

When listing the sources of supernatural power, the Washo think in terms of the kinds of power that can be controlled by shamans. All of the sources of supernatural power listed above can bestow the ability to control their powers. However, power is not confined to these sources; it is probably a feature of many of the plants and animals the Washo depended upon for [262] food. This opinion is based on the reported consequences for breaking the rules regarding the handling of native food. The person who breaks the rules becomes ill, apparently because of the power inherent in the offended food. For example, mistreatment of the pinenuts at the time of the annual pinenut dance can result in illness caused by the intrusion of a pinenut into the person.

778 Supernatural power becomes attached to particular men and women. The individual has no control over this. As the Washo say, "The wegeléyu [787] picks the man." Power can neither be bought, inherited, nor acquired from another person, but comes unsolicited in dreams. When this happens, a person either learns to use the power and becomes a shaman or else he hires a shaman to rid him of the power, for to have power and no knowledge of its control results in illness. While wegeléyu comes to only a few, it seems [888] that all people have a kind of low intensity power which is not wegeléyu. This kind of power increases in strength with age so that old people are treated with caution. Wegeléyu, however, does not increase in strength with age, but older people are thought to be more likely to acquire wegeléyu than younger ones.

778 789 821 Some of the powers confer special abilities. A man with deer (or fawn) wegeléyu can control the weather. Henry Rupert, the only living Washo

778 [789] [821] [754] shaman, said that he called up the rain twice. He no longer calls up the rain, for he now eats deer meat. A shaman cannot eat the source of his power and then pray to it; if he does, he will become ill. A person with rattlesnake or blood wegeléyu is often a sorcerer who uses his power to cause sickness and to kill. But a man with rattlesnake power can also cure, and those with other kinds of power can kill. People with special powers behave in a familiar fashion with their wegeléyus or imitate them. People with power from the water-baby walk into springs and can stay under water for long periods; those who have rattlesnake wegeléyu can handle rattlesnakes safely; and men with power from the bear sometimes behave like bears.

778 787 The dreams that bring power to men and women are not sought by torture, fasting, or any other method. Many people desire these dreams, but nothing can be done to induce one. Henry Rupert described the dream by which he obtained power as follows: He dreamed he saw a buck that was looking at him from the west. The deer said, "Don't kill my baby any more." Since then, said Rupert, he didn't kill lizards or snakes without reason. When he awoke, his nose was bleeding and it was raining. The rain, the nosebleed, and the talking deer were the unusual features of this dream and its aftermath; from them, Rupert knew he had had an extraordinary experience. From the rain, he knew his wegeléyu was water. From the time of his first dream, Rupert has continued to have unusual dreams. He dreamed about future events, and in a day or two most of them happened. Rupert hears songs in dreams that were sung long ago by the bird, bear and loon. In his curing rites, he sings songs learned in dreams.

Rupert reports a dream related by another shaman who dreamed that he saw sagebrush shaking, but that no wind blew. Then two streams appeared, one of water and one of blood. A voice asked him which is good, and he replied that water is good. Then the sagebrush laughed. By this answer, the man had chosen to use his power to cure rather than kill.

778 [755] When power comes, the individual who receives it must either get rid of it or learn to use it. Rupert apparently tried both procedures. Once he fell sick and hired a shaman to cure him. The shaman told him that the power to foretell the future was dangerous and that he would remove it. He sucked the power, a piece of bone, from Rupert's forehead. The bone, according to Rupert, was from a young male Hindu whose skeleton was stored at the Indian school at Carson City. Rupert used to play with the skeleton and says that at this time the Hindu "got on" him. Rupert has an intellectual bent and has told us he reads the National Geographic Magazine and studies psychology. This may account for the Hindu as a source of wegeléyu. After the shaman had removed the bone, Rupert lost part but not all of the power he had received from the Hindu. Apparently he lost the power to foretell the future which he had received from the Hindu, but the Hindu continued to help him in his curing.

756
778
[785]
Rupert hired a shaman to teach him to use his power. The shaman told Rupert that he must fast four days and four nights every spring and fall for four years. On the final day of every fasting period he took some Indian food and placed it in a river or spring. After four years Rupert had his power under control. This shaman, or possibly the one mentioned above who had treated him, told Rupert that an eagle and a little boy were beside him. The eagle was to talk to Rupert during the curing ceremonies and tell him if the patient would recover.

Rupert is occasionally inconsistent. He says that the Hindu boy (sometimes Rupert says that the Hindu is a girl) is not his wegeléyu, but in describing a curing ceremony, Rupert lists his wegeléyus as water, the Hindu, the eagle and the little boy. Because all four of these function as wegeléyu in curing ceremonies, we regard them as wegeléyu. It is interesting that only water wegeléyu came to Rupert in his dream. He learned about the Hindu only when the shaman who had treated him sucked the bone from his forehead. Rupert also learned about the eagle and the boy from another shaman.

[834]
Hank Pete's mother was a shaman. She became one before she was married. She ate no meat, grease or salt for four years and demonstrated the strength of her power by walking around in the snow without moccasins. Pete says sexual intercourse was forbidden to people training to be shamans, but this information was given in the course of a general discussion and not when talking about a specific case. Rupert does not mention sexual abstinence. Hank Pete's mother had a group of six people with her whom she was training as shamans. They went about, in Pete's words, like the Salvation Army, praying for the Indians, singing their power songs, and accepting donations of food and perhaps a rabbitskin blanket.

755
756
778
[158]
[753]
Hank Pete told the following story, which he said is true, about a boy's receiving power from the water-baby. A famous shaman, Welukúshkush, frequently took a young boy around with him. One day the boy had a fit and became unconscious on the shore of Lake Tahoe. His parents sent for Welukúshkush whom they blamed for the boy's condition; they wanted to kill Welukúshkush. Welukúshkush said that the boy's soul had been taken by the water-baby and that he could bring back the boy. Welukúshkush had the water-baby for his wegeléyu. Welukúshkush began to shake his rattle and pray. He walked into the water and stayed underneath for 10 minutes, according to Pete. He walked around the boy four times and had the boy's mother call his name four times. The boy began to revive; his nose bled and blood covered his chest. Welukúshkush faced the boy toward the lake and gave him his rattle to shake. Then Welukúshkush walked the boy around in a circle four times. The boy acted as if he had been asleep. After this experience, the boy became a shaman.

753 775 Ghosts are the second of the two culture elements associated with the fear configuration. When a person dies, his spirit goes east under the sun. However, the spirit of the dead person may not always depart, but may remain in the vicinity to cause sickness for a living relative. The ghost "travels" on some bit of his property that was not destroyed at the funeral but remained in the possession of a relative. In the seven cases and one general statement we have recorded of illness caused by ghosts, the ghost has been a relative of his victim.

753 775 787 All the encounters with ghosts reported by informants were in dreams. Sometimes the ghosts were seen, but more often they seemed to exert their influence without showing themselves to the victim. Of the seven cases of illness caused by ghosts, one of the victims saw the ghost in a dream, two others apparently did not, and there is no information for the other four. However, if a ghost is involved in illness, it will be identified by the shaman in the curing ceremony.

[755] Lowie recorded several examples of people seeing ghosts while awake. One man once heard some Paviotso singing and dancing. He saw some women sitting on the ground, not dancing. He spoke to them; they did not answer. He spoke to the owner of a horse standing nearby, and again received no answer. Then everyone vanished. The Washo was frightened and went to an Indian house. Another man saw two Indians approaching him. He sat down under a tree and waited for them to reach him, but they never did. "It was the Devil. . . . I don't know whether these are dead people or what." He became ill but went to a spring, bathed, and recovered. In a third case, two Indians met half a dozen dead people who seemed to be alive. They spoke to these beings but received no answer. The ghosts sat around a fire cooking squirrels; but because they were dead, they neither spoke nor drank water. The Washo became alarmed and went away (Lowie, 1939, 322-3). Particularly noteworthy in these accounts is the fact that people saw ghosts who were not relatives and in one case the man became ill because of it.

775 [92] [551] Whirlwinds are thought to contain ghosts (Stewart, 1941, 415; Lowie, 1939, 322). Holbrook says that when a gust of hot air hits someone, people say a dead person has passed by. Lowie (1939, 322) reports that a dead person's name should not be uttered. "Whoever broke this rule was rebuked as follows: 'He is dead, he is gone, don't call him!'"

II

753
775 Beliefs about the causes of disease and curing methods depend to a great extent on supernatural power and ghosts. Soul loss, an encounter with a ghost, and sorcery are three causes of illness involving the supernatural. The first is apparently rare: the taking of the boy's soul by the water-baby in the Welukúshkush story recounted above is the only case we have recorded. Encounters with ghosts are more common. Our informants reported seven such encounters and made one general statement about this cause of sickness. The ghost causes illness, says Rupert, by "drying up the person's blood." It is possible, however, that ghosts kill by stealing a person's soul, for our informants often speak of the desire of the ghost to "take the relative back with him." However, no informant declared specifically that ghosts capture souls.

753
754 Diseases caused by sorcery are also common. Our informants reported three cases and made four general statements about this source of disease. All the statements and two of the three cases indicate that sorcery involves nonrelatives, but in the case of diseases caused by ghosts the ghost and his victim are usually related. Sorcerers are persons with supernatural power who cause illness by magically shooting some object into their victim. They accomplish this simply by thinking about the person they wish to make ill or else by blowing their breath in his direction. Lowie's various accounts of sorcerers casting their spells differ from the statements of our informants. Lowie describes one sorcerer as spitting into his right palm and clenching his fist. Then he opens his fist, the thumb separated from the fingers (Lowie, 1939, 319). On another occasion, "The sorcerer merely took a bath in the cool of the early morning on four successive days and talked to himself. When ready, he would get within possibly five hundred yards of his victim. Then he would rub some stuff into the palm of his hand till it became invisible. He also took some fine sand and stepped on it with his left foot. His victim would fall sick, and within two days the heart would be knocked out of him without anyone's suspecting the cause, so that he would die. . . . Some doctors used a different procedure, picking up dust and scattering it toward their enemy with their hands" (Lowie, 1939, 320).

753
757 [756] [787] Some diseases have no supernatural cause and may be treated by anyone with one of the large number of vegetable medicines known to the Washo. However, some of the best of these medicines are gathered by shamans who, in dreams, learn where they grow. The shaman may then sell these medicines or give them away.

756 [787] Shamans cure supernaturally caused diseases by means of their powers. The shaman uses a set of implements (wegeléyu) in curing ceremonies. Each shaman dreams of his implements, and these therefore differ slightly among shamans;

shamans; however, pipe, tobacco and cocoon rattle are used by all shamans. 756
Rupert uses Indian tobacco, a handkerchief, a bone, a bone whistle, a cocoon
rattle, a little bag and an eagle feather. He rolls the tobacco into cigarettes, [178]
but in pre-white times, the shaman used a tubular stone pipe. The eagle
feather represents Rupert's eagle wegeléyu and the bone his Hindu wegeléyu.
Curing takes place indoors after sunset and usually lasts four nights, although [755]
the ceremony can be shortened to two nights.

Rupert begins by washing the patient's face and arms with cold water. 755
Everyone attending the ceremony must wash his face. The patient lies down 756
with his feet to the east. Rupert then smokes some white man's tobacco because of the Hindu. He ties the handkerchief around his head with the bone inside. He prays, talks, smokes Indian tobacco, blows smoke on the patient and walks about. He blows his whistle and passes a bag over the patient. Rupert claims that he can catch the disease in his whistle, and that when he does so, the whistle doesn't make much noise. Rupert makes an offering of pinenut meal by scattering it over the patient and toward the door. He sings his wegeléyu songs, accompanying himself with the rattle. Alternately he smokes, sings and prays, calling upon the Hindu, water, eagle and little boy to help. If Paiutes are present, they sometimes sing with the shaman, but, says Rupert, the Washo are a little afraid and do not sing. The first three
nights the ceremony lasts until about midnight; then refreshments are served. [262]
During the curing the shaman and the patient abstain from meat and salt. On
the fourth night the ceremony lasts all night and everyone must stay awake; [263]
after the ceremony all spectators must take a bath.
[515]

At some point in the ceremony the shaman has a vision and can foretell whether or not the cure will be successful. According to Rupert, if the cure is to be successful, the eagle will join him in singing and he will see clear water and green vegetation. If the eagle fails to join the singing and Rupert sees a dry and quiet scene, the patient will not recover. If the shaman sees water that is not clear, the patient will recover only partially. Rupert does not like to predict the outcome of the cure because he says that the eagle sometimes fools him and makes him lie to the patient's relatives.

Some variation in the curing ceremonies seems to depend on the cause of the disease. Stewart, Lowie and our informants mention the sucking out of the disease object as a part of the curing ceremony. The shaman displays the object and then disposes of it by throwing it away, throwing it in a fire, or by swallowing it. This occurred either when a person became sick from mistreating Indian food or was a victim of sorcery. In the latter case the shaman might not himself be able to cure the patient, but would see the face
of the sorcerer in a vision. Then the patient's relatives could kill the sorcerer [683]
or force him to cure the patient; either procedure would result in his recovery.

755 756 775 [787] When a ghost is the cause of the disease, the shaman has a vision in which he identifies the ghost and the property upon which it had traveled. The shaman then advises the patient to get rid of this property; or, if the patient wants to keep it, he makes an additional payment to the shaman who then gives instructions that, if followed, permit him to retain the property without getting sick. Rupert usually instructs the patient to give water to the property. Sometimes the ghost gives the patient orders. When the shaman discovers this, he advises the patient to follow the orders of the ghost. Rupert relates how one ghost told her niece to bathe in a hot spring. The niece failed to do so and became ill. Rupert treated another case in which a ghost traveled on a winnowing basket and some eagle feathers and made a granddaughter ill. Rupert told the girl to give water to these things. She did and recovered.

753 756 [779] [787] Two causes of disease affect only shamans. One is illness resulting from power that has come to an individual who cannot control it. Such a person either learns to control the power or else has a shaman cure him by sucking out the power during a regular curing ceremony. The source of the second illness is the loss or destruction of the shaman's curing implements. If they are lost, another shaman may be able to locate them by having a vision in the course of a curing ceremony. If the implements are permanently lost, new implements may apparently be substituted. This conclusion is based on a single case in which Rupert claims to have cured a sick woman by informing her that two small children had lost her implements and that she must replace them. The destruction of a shaman's implements results in his death, according to our informants.

721 756 [752] [789] Warfare was a second culture pattern in which supernatural power played a prominent part. Shamans accompanied all war parties and served two functions: since they were often specialists in herbal medicine, they treated the wounded, and they called upon their supernatural powers to keep the enemy and his dogs asleep during the assault. The Washo attacked at night, hoping to surprise the enemy, and the shaman selected the night.

726 756 789 821 Shamans who had the power to control the weather sometimes aided in warfare. A story widely known among the Washo tells of a battle with the neighboring Maidu near Honey Lake in California. A leader gathered a band of warriors and two powerful shamans who possessed storm wegeléyu. The shamans summoned a north wind mixed with hail and the enemy froze to death. Lowie reports a similar version of this story (1939, 321).

721 754 756 Before a war party set out contests between shamans were held because the warriors wanted the shamans with the strongest powers to accompany them. Hank Pete says that the shamans filled their pipes and began to think about each other. They then exchanged pipes and began to smoke. After a

721
754
756 few puffs the weaker shaman would start to choke and would fall unconscious,
perhaps with blood running from his nose. After a time the stronger shaman
would call the weaker one's name and revive him; or, if this failed, the stronger
721 one would sing the weaker shaman's wegeléyu song and shake his rattle
774 over him. If, after three repetitions of the song, the weaker shaman was still
75 unconscious, the stronger would blow water from his mouth onto the other's
forehead. This apparently was always effective. Although Pete did not explicitly
say so, the mechanism involved in this kind of shamanistic contest
may involve the loss and return of the soul. The unconscious state and the
bleeding nose are similar to the symptoms of the boy in the Welukúshkush story;
the two curing ceremonies have a common element in the calling of the
unconscious person's name. Paralysis or unconsciousness and a bleeding
nose are reported by Lowie in cases that probably involve soul loss (1939,
322-3).

756 Contests among shamans were held regularly and not always as part
of the war pattern. Possibly they were a means by which shamans publicised
789 their powers. Rupert reports that shamans were able to walk on hot coals and
climb steep cliffs where there were no handholds. Rupert says a friend of his
[754] saw a shaman dance in fire and then vanish. According to Rupert, shamans
also competed by magically shooting objects into one another. If a shaman
[755] failed to remove an object shot into him by another, it was understood that he
was the weaker of the two. The stronger shaman would then remove the object,
for contests among shamans were never a killing matter.

626 Both the threat of sorcery and the fear of an accusation of sorcery
754 were important patterns of social control among the Washo. These patterns
usually operated among nonrelatives. Anyone could hire a sorcerer to cast
a spell on an enemy; therefore, an individual would try to avoid trouble with
others, even with those who were not particularly formidable, for anyone
626 could enlist aid. The activities of sorcerers were held in check because sorcerers
683 were sometimes killed by angry relatives of the victim. If a sorcerer
became particularly troublesome, the Washo might reach a kind of general
754 agreement that he should be killed. According to Pete, even the relatives of
the sorcerer might agree that this was necessary. The killing was some-
[775] times by stoning and sometimes by other methods. The people who killed a
sorcerer were not in danger from his ghost because ghosts bother only relatives.
Rupert says he never heard of the ghost of a murdered man returning
to trouble the murderer. Lowie's discussion of the measures taken to control
sorcery (1939, 319-20) agrees with the statements of our informants.

754 Witches as well as sorcerers exist among the Washo. A sorcerer has
778 active control over his wegeléyu, whereas a witch is an old person whose generalized
888 power (not wegeléyu) has become fairly strong with age. Sorcerers

754
778
888
were active workers of malevolence; witches were hapless victims of a condition arising naturally from their age. However, this situation was obscured by the fact that older people were thought to be likely candidates for acquiring wegelí·yu. Older people, therefore, were open to charges of sorcery; although innocent, an old person might be on the defensive knowing that he could inadvertently bewitch someone, especially a child or a young person. The belief that older people are more likely to acquire wegelí·yu than younger ones is not supported by the testimony of our informants regarding the ages at which known shamans acquired power. Hank Pete's mother acquired her power before marriage, probably before the age of 15; Rupert acquired his as a young man.

626
762
775
Social control among relatives was based on a fear of ghosts rather than sorcery. Relatives who could not be influenced in any other way could be reached by an attempted suicide. The reason is clear: the dead person could become a ghost; hence he would be in a position to threaten the life of his living relatives. The usual method for an attempted suicide was to eat wild parsnip. The poison acts slowly and gives plenty of time to save the victim. The Washo force an emetic down the person's throat and he vomits up the poison.

626
762
The four examples of attempted suicide recounted by our informants were definite attempts at resolving family problems. In one case, a man had been having difficulty with his wife; she was interested in another man. [837] The husband ate wild parsnip, but was saved. As a result his sons brought pressure on the wife and made her behave. The couple stayed together until the husband died. A second case involved trouble between a brother and sister. [593] The sister had been taking money from the parents, and the brother objected. The girl threatened suicide and the boy said, "Go ahead -- I don't care." The girl took wild parsnip, but not enough to kill her, and she was saved. The parents were very happy to have her revived. After this episode, the son left [461] home. In the third case a man never wanted to work, and his mother and sister didn't like it. He attempted suicide by hanging, but the rope was too long and his feet touched the floor. A relative cut him down. The suicide attempt frightened his mother and sister and they stopped complaining. The fourth case concerned a woman. Our informant didn't know the reason for her attempt to kill herself, but commented, "It's always family trouble."

762
Our informants described four cases of successful suicide. Of these, three had no connection with social control. One was that of a helpless old man who lived alone and had no relatives. On a return trip from California where the Washo had been gathering acorns, he asked to be abandoned. Another successful suicide was a woman who had lost a daughter whom she loved very much. She ate wild parsnip and died in three hours. The third case, which is probably apocryphal, concerns a shaman who tried unsuccessfully to

762
cure his wife. When she died, he broke the taboo against eating salt and died. [263]
The fourth successful case did involve an attempt at social control. A father
and daughter did not get along because the daughter was supporting the father. [784]
The daughter complained and the father threatened suicide. He repeated the [626]
threat a day later and the daughter told him to do whatever he wanted. The
father took his gun and shot himself below the chin. This method of suicide
is not typical and was clearly inappropriate, because it gave the daughter no
chance to change her behavior.

Hank Pete says that he has heard many threats of suicide and that peo- 762
ple do this, "to scare money from old parents." Pete also says that men at- 626
tempt suicide more often than women, who just leave home when interpersonal 562
difficulties arise. The destruction of the self is an ultimate threat, and the
fact that men are more likely to invoke it than women indicates a lack of male
authority in Washo culture. This same characteristic of the male role was
revealed in an analysis of role behavior by kinsmen among the modern Washo.
"....Men tend to see their relationships regarding who dominates them as
clearly structured, but are much less clear as to whom they dominate; women
see their relationship with subordinate relatives to be structured almost as
clearly as their relationships with dominant ones. This may be an indication [157]
that Washo males tend to lack self-confidence...." (Freed, 1960, 370). We
believe that the lack of male self-confidence is a modern phenomenon and can-
not be projected into the past. The reason probably is that males have a more [157]
difficult time adjusting to modern conditions than women. This has been noted
in other American Indian hunting-gathering tribes (Hallowell, 1942, 48;
Caudill, 1949, 423). In the case of the Washo, the main difficulties of the men
may be due to seasonal unemployment and lack of economic opportunities. Of
the five cases of violence against the self involving attempts at social control,
three were by men; of these three, two were motivated by complaints by wom-
en that a male relative was making no economic contribution.

We suspect that among the modern Washo the use of alcoholic beverages 762
has partially replaced the threat of suicide in interpersonal relations. Bertha 273
Holbrook commented, "Nobody commits suicide today -- instead they begin
drinking." Alcohol probably has many functions in modern Washo culture; its 177
role as a means to control the behavior of relatives is possibly a minor one. 626
If the control of relatives is one of the functions of alcohol, its effectiveness
is based on different culture patterns than is the effectiveness of suicide. Sui-
cide controls through the fear of ghosts; drinking may control through fear of
the direct aggression of the drunken person, especially because the Washo be-
come hostile and aggressive when they are drinking. It is possible that a per-
son may die from overindulgence in alcohol or may be killed in a drunken
brawl and thus become a ghost, but this is infrequent and therefore a minor
consideration.

764
768
[537]
(178)
(783)

A fourth culture pattern in which ghosts play a part is the disposal of the dead. Two features of funerals are connected with the fear of ghosts. First, all the property of the dead person is destroyed and his house is torn down and the parts scattered. Second, at the time the body is cremated or buried an old man steps forward and makes a long speech in which he tells the ghost of the dead person to stay away and not bother the living. With modifications the Washo observe these customs today. Houses are no longer destroyed after a death for they are too valuable, but they are temporarily abandoned. Before the house is re-occupied it is smoked with sagebrush or juniper. Cremation is not practiced; the modern Washo bury their dead.

857
888
758
[778]

Some features of child-rearing patterns are related to supernatural power and the fear of ghosts. The fact that the aged may inadvertently bewitch people affects their relations with children. Mothers try to keep their babies out of the sight of old people who are unrelated. Pete says that to give food to a child was especially dangerous. Small children lived in the house next to Hank Pete and his wife; these children were Pete's sister's daughter's son's children, but they were not related to Pete's wife. Pete's wife never gave them anything to eat. Even older relatives could be dangerous unintentionally. Pete said they would pray to water not to make their relatives of the third descending generation sick when they gave them something to eat. Bertha Holbrook's daughter who lived with her had several young children. We spent many afternoons in Holbrook's house, but never saw any unrelated children playing with the Holbrook children. Bertha remarked that the Washo don't like to have their children going to other houses to play. She said that if her grandchildren do go to other houses, she likes to go with them to make them behave. Although she never spoke of the fear of old people as a factor in children's visiting patterns, we think that this fear may be the reason children play chiefly with relatives.

861
775

Another feature of Washo child rearing is that parents seldom physically punish their children. Hank Pete explains that if a person beat his child a dead relative of the child, through the other parent, might become angry and kill the child. Then the child would become a ghost and kill his parent. Pete told a story of a family fight in which a man treated his son very roughly. The son took sick and a shaman diagnosed the trouble as being caused by the anger of the boy's dead relatives. The boy died; then the man sickened and he too died because the ghost of the child killed him. No other Washo ever volunteered this explanation. However, we once asked Rupert if he had ever handled a case like this. He said he had not, but that he had heard of such cases from older people and he confirmed Pete's explanation.

224
778

Hunting is another culture pattern in which supernatural power is involved. Such power is used only in deer and antelope hunting. One use in

One use in 224
deer hunting involves the purification of an unlucky deer hunter. According 778
to Pete, the shaman prays four days, after which the hunter gives away the
first deer he kills. A second use of power in deer hunting is to locate a med- [783]
icine called mugâlu which, when properly used, puts the deer to sleep. Pete
says that only shamans dream of this root. They wash and pray before col-
lecting it; afterwards they give pieces of it to friends and relatives. The
hunter puts a small piece of the root in a fresh deer track and begins to trail
the deer. When he catches up to the deer, he finds it sleeping.

A shaman leads the communal antelope hunt. He sees the antelope in 756
his dreams and talks to them. He sends boys to see if a herd has appeared 224
as seen in his dream. When a herd has been sighted the Washo build a corral [787]
of sagebrush with a long chute leading into it. The shaman smokes his pipe
and charms the antelope into the enclosure aided by a slow drive on the part [417]
of the other Indians. Once the animals are inside the corral the Washo close
the entrance and kill the animals (Lowie, 1939, 324-5). [824]

III

This paper has discussed the characteristics of supernatural power 778
and ghosts among the aboriginal Washo. These elements occur in a number 775
of culture patterns and therefore perform an integrating function in that they 182
give Washo culture a degree of logical consistency. The recognition of the [152]
fear configuration helps to explain some features of Washo behavior in which
the rationale is not readily apparent. The formation of children's play groups,
the reported infrequency of physical punishment for children, and the corre-
lation of attempted suicide and troubles within the family are examples. A 888
statement by Hank Pete indicates that fear of old people may have been one
factor in determining household composition. In a discussion of household 572
composition during the fishing season at Lake Tahoe, Pete remarked that the 778
fear of old people was a limiting factor in the number of people who would 754
live together in one windbreak. It would be difficult to test this statement
today, but a brief survey of the attitudes of younger parents toward having old 152
people in the same household would indicate both the present-day strength of
the fear configuration and the possibility that this configuration was a factor
in indigenous household patterns.

Among the modern Washo, the fear configuration is almost certainly 152
less prominent than it was in aboriginal times because the elements upon 178
which it was based are disappearing (Merriam and d'Azevedo, 1957, 617).
However, this configuration may still be useful in explaining some of the

152
178 behavior of the modern Washo, for the Washo remain a recognizable group, the language is still spoken, and although modern Washo culture is chiefly western American, there remain a moderate number of cultural patterns from aboriginal times (Freed, 1960; Merriam and d'Azevedo, 1957, 615-18; Stewart, 1944, 82-3).

Notes

114
115
122
128 1. This paper is based upon 14 weeks of field work in the summers of 1952 and 1953. Our principal informants were Nancy Emm, Bertha Holbrook, and Hank Pete of Dresslerville, Nevada, and Henry Rupert of Carson City, Nevada. The field work was sponsored by a grant from the Department of Anthropology, University of California, Berkeley, to whom our thanks are due. We also wish to thank Miss Bella Weitzner and Mr. Philip L. Newman of the American Museum of Natural History who criticized early drafts of the paper.

Bibliography

113

Caudill, William
1949 Psychological Characteristics of Acculturated Wisconsin Ojibwa Children. American Anthropologist, Vol. 51, pp. 409-27.

Freed, Stanley A.
1960 Changing Washo Kinship. University of California Anthropological Records, Vol. 14, No. 6, pp. 349-418.

Hallowell, A. Irving
1942 Acculturation Processes and Personality Changes as Indicated by the Rorschach Technique. Rorschach Research Exchange, Vol. 6, pp. 42-50.

Lowie, Robert H.
1939 Ethnographic Notes on the Washo. University of California Publications in American Archaeology and Ethnology, Vol. 36, No. 5, pp. 301-52.

Merriam, Alan P., and Warren L. d'Azevedo
1957 Washo Peyote Songs. American Anthropologist, Vol. 59, No. 4, pp. 615-41.

Mooney, James
1928 The Aboriginal Population of America North of Mexico. Smithsonian Miscellaneous Collections, Vol. 80, No. 7.

Nadel, S. F.
1951 The Foundations of Social Anthropology. The Free Press, Glencoe, Ill.

Park, Willard Z.
1938 Shamanism in Western North America: A Study in Cultural Relationships. Northwestern University Studies in the Social Sciences, No. 2.

Stewart, Omer C.
1941 Culture Element Distributions: XIV, Northern Paiute. University of California Anthropological Records, Vol. 4, No. 3, pp. 361-446.

113

1944 Washo-Northern Paiute Peyotism: A Study in Acculturation. University of California Publications in American Archaeology and Ethnology, Vol. 40, No. 3, pp. 63-142.

Whiting, Beatrice B.
1950 Paiute Sorcery. Viking Fund Publications in Anthropology, No. 15.

WASHO WITCHCRAFT: A TEST OF THE FRUSTRATION-AGGRESSION HYPOTHESIS[1]

by Philip E. Leis

754
154
121

The belief in witchcraft has frequently been interpreted psychologically as a socially approved means for releasing aggressions. The very nature of group life requires that individual desires be restrained -- "frustrated," and the aggressive responses toward the frustrating objects, such as parents, redirected to a sorcerer or some other scapegoat-like being. Whether individuals actually indulge in witchcraft is beside the point; the fact that members of a society believe in its existence is sufficient for them to vent their spleen against the real or imaginary sorcerers. The relation between frustration and aggression was stated as a hypothesis by Dollard and his associates (1939, 1) as follows: "The occurrence of aggressive behavior always presupposes the existence of frustration and, contrawise, that the existence of frustration always leads to some forms of aggression." This statement was later modified by one of its authors, who recognized that there were several different types of responses to frustration (Miller, 1941, 338), but the point with which we are primarily concerned here is that aggression may be a response to frustration and this reaction may be in the form of beliefs in witchcraft. [114]

754
154
171
121

Several studies have supported this view. Kluckhohn's analysis of the Navajo indicated the "adjustive" value of their beliefs in witchcraft for maintaining the integration and stability of the community. Prior to governmental controls, the Navajo were able to release their aggressions through warfare, but with this activity blocked, Kluckhohn found that the incidence of witchcraft accusation had increased; his entire thesis pointed to the significance of such beliefs for disposing of the personal and socially disruptive effects of aggression (1944). The Saulteaux and the Ifaluk, studied by Hallowell (1955) and Spiro (1950), respectively, displayed very little overt aggression in their social relations; yet, there were frustrating experiences in childhood and these were reflected in the covert release of aggressions through hatred and fear of supernatural forces. The early socialization of the Hopi, according to Eggan (1950) and Goldfrank (1945), was one in which frustrations were kept at a minimum, but in later childhood frustrating situations occurred frequently. Accordingly, aggressive behavior patterns of adult life were apparent in the constant Hopi "guerilla warfare" (Eggan, 1950, 234) of gossip and witchcraft accusations against neighbors.

154
171
121

These examples agree on two points. First, every society, so far as we know, places certain regulations or restrictions on the individual, particularly at some time during childhood, which can be called frustrating. Second,

1/1 [footnote appears on p.66 -- Analyst]

121
154
171
the consequence of such restrictions is to create aggressive tendencies that must be canalized in some culturally approved manner so that psychological and intrasocietal conflicts are minimized.

754
154
171
121
114
Nadel takes issue with the latter point. He argues that it is a false assumption "that witchcraft beliefs 'canalize' hostility or 'deflect' hostile impulses into socially relatively harmless channels" (1952, 28). Presenting evidence from four societies in Africa, he points out that belief in sorcerers is "conspicuously related to specific anxieties," (1952, 28) and therefore it only accentuates concrete hostilities. Though Kluckhohn, for one, would probably not have denied the "costs" of witchcraft, he did feel these were frequently stated without recognizing the potential euphoric effects of beliefs in witchcraft for the social system as a whole (1944, 67-8).

121
174
154
[178]
The Washo provided an opportunity for an exploration of this difference in opinion. Since the Washo belief in the prevalence of witches changed drastically over a period of approximately 15 years, we were able to ask the question of whether the elimination of witches as objects of aggression would help solidify the society, as Nadel suggested, or would create a need for new opportunities for releasing aggressions.

121
871
754
154
In addition to addressing ourselves to the function of witchcraft in Washo society, we were also concerned with education, the intervening variable between frustration and the acceptable objects of aggression. Of course, members of a society do not usually consciously employ the educational process for this purpose, and the presence of sorcerers rather than some other kind of scapegoat can only be accounted for by particular historical developments in Washo culture, but the transmission of knowledge about certain phenomena will obviously affect the possibility of their being manipulated as objects of aggression.

754
756
[683]
The Washo were a fairly typical Great Basin group, according to Edgar Siskin, who visited them in the late 1930's, except for their fear of and belief in the power of shamans, which he thought achieved "an unsurpassed eminence in the Washo" (1941, 125). Lowie, after briefly visiting the Washo in 1927, observed that a correlation of shamanistic power with evil magic was prevalent in their world-view, and he relates several instances in which shamans were supposed to have been responsible for deaths. When this would happen four or five men would finally agree to murder the shaman. One of Lowie's informants believed one of the shamans, or Indian doctors, as the Washo call them, to have been "mad." "He tries to poison us all, it seems to us. That's the way he used to do in the old days. A Washo doctor always tried to injure his own people in the old days" (Lowie, 1939, 320).

Actually, the Washo seem to have held a dual conception of the shaman; 756
he had the ability both to kill and to cure, and this coincided with the Washo 778
view of the supernatural beings that inhabited nature. The Washo regarded 776
their world as pervaded with power, which was a vague and enormous force
embodied in a multitude of spirits. These spirits resided in natural and super- [754]
natural forms, such as birds, animals and "water-babies." Communion with
these spirits came in dreams and provided the power by which a person could [787]
"exercise a possible measure of control over the fortunes and hazards of life"
(Siskin, 1941, 27). To exercise this power and thus become a shaman was
possible, however, only after a spirit presented itself to a neophyte, who cul-
tivated it by proper training. Thus the vision quest was not practiced, though
Downs notes that in actual practice it was probably a "conscious and voluntary
act on the part of an individual" (1961, 370). In the case of children, Siskin [787]
quotes an informant as saying that one as young as seven years old could dream
about a spirit, but he "will not know what it is all about" (1941, 41). A shaman,
however, could recognize when a child had been visited and would entreat the
spirit not to harm the child and to leave him until he had grown up.

756
Obtaining a spirit was looked upon as being both good and bad. Its
entrance into a person was accompanied by sickness, and its instructions often [753]
produced physical hardships by demanding a rigorous pattern of behavior, in-
cluding abstention from certain foods, during the training period. On the
other hand, possession of a spirit gave its carrier powerful controls over his
fellow man and his environment.

The possession of a spirit permitted an individual to become a shaman [754]
or so-called Indian doctor, with the ability to cure illnesses, but at the same
time, he had the potential of practicing black magic and becoming a sorcerer.
Indeed, the Washo did not terminologically distinguish between shaman and
sorcerer, and the dual nature of this role was best exemplified in cases of
illness. It was the responsibility of the Indian doctor to deal with all mala-
dies. After performing a four day ritual of bringing his power to bear on the 75
diseased object that had intruded the patient, the doctor would then extract the
item. The reasons given for the cause of the disease were many, and in-
cluded violation of ritual specifications connected with hunting, malevolence of
ghosts, and contact with the dead. The most frequent reason given for ill-
ness, however, was witchcraft, which shamans were expected to cure since
one of them was always thought responsible for the condition (Siskin, 1941,
140). This duality of the shamans was definitely considered to be weighted
toward the negative side. More often than not a patient would die, and this was
considered proof of the evil nature of shamans. The Washo believed that even
if a shaman were to cure someone one day, this same person could be his vic-
tim the next. Siskin believed that "the feeling of apprehension and anxiety [152]
with regard to sorcery may be said to permeate the culture," and this also

775
[152] applied to those Washo who had "achieved varying degrees of sophistication"
(1941, 82). Elsewhere in his thesis he again says, "Every layman's testimony
bristled with a cynical and resentful awareness of the grasping character of
shamanistic practice" (1941, 121).

178 Siskin's main concern was with the reasons behind the rise and decline
of the Peyote Cult during his period of study and its effect on the entrenched
756 power of the shamans. The shamans seemed to have won the battle at that
668 time, just as they had before when confronted with the Ghost Dances of 1870
and 1890, and when any budding temporal leader had challenged their domain.
Though the shamans succeeded in having the Peyote Cult leaders expelled from
Dresslerville, the main all-Washo community in Nevada, their victory had the
appearance of being a Pyrrhic one, and Siskin predicted a short life for them.
This indeed turned out to be the case. Whereas Siskin listed 10 known shamans
in 1939 (1941, 28), only one remained when we studied the Washo during the
summer of 1956, and he was trusted and not feared by anyone. In other words,
the sole remaining shaman was "good" as opposed to the "bad" Indian doctors
who practiced witchcraft.

The shamans, except for this one, and the concomitant fear of witch-
craft, had been disposed of in a number of ways. The position of the Indian
doctors was challenged by the entrance of the Peyote Cult during the 1930's,
the period of Siskin's (1941) and Stewart's (1944) studies. The new movement
promised cures and thus struck directly at the power of the shamans. Though
the effect of Peyotism was not wholly responsible for the downfall of the
shamans, this encroachment undoubtedly was the beginning of their decline.
A few shamans were subsequently murdered, though my informants empha-
sized that their deaths were made to look like accidents, and others died of
[154] natural causes. This explicit evidence of sorcerers' being the objects of ag-
[754] gression clearly placed the role of witchcraft beliefs among the Washo in the
same category as that found among the Navajo, Hopi, Saulteaux and Ifaluk.

The fact that the shamans' ranks were not refilled can be partially at-
tributed to their beneficial "doctoring" functions' having been taken over by
the Peyote Cult leaders, who lived near Dresslerville, as well as by white doc-
tors. Nevertheless, one of the Peyote leaders reportedly visited the remain-
ing shaman for treatment of certain illnesses thought to be peculiarly "Indian,"
and several Washo were convinced that some whites as well as Indians at-
tended either the shaman or the white doctor depending on the type of illness.
[754] But it must be remembered that no one believed this particular Indian doctor
would practice witchcraft. Witchcraft, then, had literally died out, and there
[778] was little indication in 1956 that it would be revived. Even the children of the
[191] remaining shaman were thought to be unable to obtain "power" because they
did not know how to speak Washo, a prerequisite for becoming a shaman.

178 Scotch's informants suggested a slightly different reason for the potential fail-
668 ure of shamanism: "...in order to be a shaman, one has to be chosen by a
756 visit of a supernatural being in a dream and... 'powers that be' are no longer
[787] visiting the Washo" (1957, 82). The elderly Washo still believed in witch-
craft, let it be understood, but they did not believe anyone continued to prac-
tice it.

177 Downs (1961, 373) has come to a different conclusion concerning the
178 future of the shamans and it is important to quote him at length:

756

> "Despite a belief in and a dependence on shamanistic curing or its latter-day counterpart, the peyote curing session, most Washo are willing patients of white doctors. This suggests that perhaps the old views are disappearing under the scientific certainty of Western Medicine. Quite the reverse seems true, however. Every failure of white medicine strengthens the Indians' belief that the real source of curing power is a gift from nature. Every success is attributed to assistance the white men have received from Indians' power. When asked the direct question: 'Why aren't there so many Indian doctors today?' my informant answered: 'Well, Indians just don't need all that power today. The white doctors know a lot of things and can cure sickness pretty good. In the old days we didn't know them things so we had to have them real powers.' This attitude, that nature provided whatever was necessary for Washo survival, crops up in other contexts....Far from disappearing, the old notions seem to be maintaining a strong hold on the minds of the Washo. As the number of active peyotists dwindle (Merriam and d'Azevedo, 1957), one gets the impression that the shamanistic forms may again become a more important part of Washo life."

178 It is not clear, however, whether such a revival of shamanism as per-
754 ceived by Downs would include the attendant beliefs in witchcraft as well, for
the faith in the one remaining shaman indicated that even though the Washo do
756 not terminologically distinguish between shamans and sorcerers, they can
accept the idea that a shaman may be wholly "good."

154 The demise of the shamans has a number of alternative implications
for the frustration-aggression hypothesis. First, the decrease in Indian
178 doctors may have coincided with decreasing frustrations in other areas of
756 Washo life. Second, aggressions formerly directed toward shamans may have
been redirected into other institutionalized outlets. Finally, the aggressions
may not have been adjusted to the new circumstances and have yet to find a
socially acceptable manner for their release. On the other hand, given the
position of Nadel, we might expect that a decrease in the fear of shamans

756
154 would foretell a greater integration of Washo society by eliminating one of the
178 sources of manifest hostility among its members.

15 Considering the first alternative,[3] there was little evidence for any de-
86 crease in the frustrating experiences encountered by a Washo; indeed, if anything, the trend was in the other direction. At the time shamans and fear of witchcraft were predominant, the experiences of childhood, as reported by Siskin, seemed to offer little restraint in the more obvious aspects of socialization. The weaning process was a gradual one that took place between the ages of one and two, and toilet training began only after the child was walking
[854] and could understand the instructions of his parents. Until that time infants were confined to cradleboards, or what the Washo call "baby baskets," though they were taken out if restive at night and were freed for short periods during the day. Following weaning, the children were treated gently and given the most tender part of the game animals until about nine years of age (Siskin, 1941, 19-20).

155
861 Washo children were taught four principal lessons of behavior: to re-
[183] spect their elders, to avoid fighting among themselves, to play quietly, and to refrain from boasting, lying or stealing. The approved technique for en-
[867] forcing these educational tenets was "to tell them to behave and talk kindly to them." Nevertheless parents still sometimes threatened to have a delinquent carried off by a wild beast or to have his eyes picked out by an owl if he did not behave (Siskin, 1941, 20). Whipping was infrequent, as Lowie (1939, 305) had also noticed: "The Washo did not strike naughty children, but merely talked to them."

861 For the most part, the recollections of my elderly informants were in
855 agreement with this description of traditional child training, and they stressed the permissive upbringing given children in the past.
155 Young boys and girls were never allowed to cry, but were attended to immediately; punishment was usually verbal rather than corporal. One man did say that if a boy continued to act very badly after he had been reprimanded, he would be thrown into ice cold water. If this did not work, then a sharply pointed stick might be thrust through his ear lobe to punish him and drive out the badness, though such an
155 act may have been more of a threat than an actual practice. The weaning
862 process was also thought to have been trying at times, for if a child would not give up the breast within two years, usually the time allotted before having another pregnancy, red pepper was placed on the nipple or a lizard was offered instead of the breast to frighten the child.

155
86 Notwithstanding these more severe restraints, the permissive early training period of the Washo at the times they were visited by Lowie and Siskin appeared to be comparable to the Hopi. Frustrations did not begin until later

[3] [i.e., that the decrease in Indian doctors may have coincided with decreasing frustrations in other areas of Washo life.--Analyst]

Frustrations did not begin until later

childhood when boys and girls found their omnipotent parents subjected to a 152
dominant white population (Eggan, 1950, 231), and when they began to recog- 155
nize the difficulties of obtaining a subsistence living in their extremely harsh
natural environment.

It is of interest that just as frustrations were not imposed until later 155
childhood, so knowledge and fear of shamans was acquired comparatively 867
late, between the ages of five and 10. Mead has suggested in her work that
the anxiety of a mother over sorcery can be transmitted to an infant (1942, 754
57), and the same was probably true for the Washo; but in terms of directed learning, the adults were careful not to begin to instruct children at too early an age on this matter. Parents mentioned animals when trying to frighten young children into obedience, but sorcerers were never referred to for this purpose. The reason given by one elderly man for waiting so long to tell them that so-called "bad" Indian doctors were the cause of sickness and death was that children were particularly susceptible to being witched. If they were threatened or even told about the power of the shamans, the parents might be overheard by one of the shamans who would then actually make the child ill to accommodate, or spite, the adults.

In discussing the Washo of the 1930's, we have been concerned with 121
their beliefs in witchcraft, the child rearing patterns that were character- 155
ized by first permissive and then restraining practices, and the education of 754
the children regarding witchcraft. Each of these had changed by the time of 178
our study in 1956. 86

From my observations and the opinions of my elderly informants, the 178
child rearing practices had become more severe than those described over a 854
decade earlier in the literature. The ideal pattern of attending to the baby's
needs immediately was no longer adhered to in practice. Babies were left to [183]
scream in their baskets for long periods of time before their mothers at-
tended to them. Toilet training often began before the child was a year old. [863]
With mothers going off to work during the day in the neighboring white com-
munity, younger children were often put in the care of older siblings who re- [464]
sented this encroachment on their freedom and therefore ignored their charges
as much as possible. In the past, parents "spoke" to their offspring because
they did not think an infant was responsible for any of his misdeeds, and also
because talking frequently obtained the desired response. This changed to [861]
frequent employment of corporal punishment. The social and natural environ- 178
ment, which the Dresslerville Washo in particular faced, remained a diffi- 152
cult one, and the frustrations incurred in becoming a self-supporting member of the adult community did not seem to have greatly changed since the 1930's. An independently arrived at judgment of these circumstances was made by Scotch (1957, 94-5) at approximately the same time as our study:

178

> 152 "...the frustrations of daily life are a constant source of stress and conflict among the Washo. In addition, there is another factor which could be called 'powerlessness'....By powerlessness is meant an inability to shape one's own destiny. Through a combination of contemporary circumstances, the bulk of the Washo find themselves unable to remain as they are and yet no available channel for change seems to exist."

178 In accordance with the frustration-aggression hypothesis, the expected
154 result of this growing restraint would be an increase in witchcraft beliefs and
754 fear of shamans. Yet, as we have already mentioned, the number of shamans
steadily declined until there was only one left in a small settlement near
756 Dresslerville.

178 The decreasing threat of witchcraft was clearly reflected in the educa-
867 tion of the children. They were no longer taught to be afraid of older people
because they might be harmful shamans, and illness and death were attributed
754 to natural causes, such as tuberculosis. The pattern of parents forcing their
756 children to stay near home for fear they would be made ill by "strangers,"
who might be "bad" shamans, had also broken down. In talking with about 15
154 children between the ages of four and 12, all except one girl believed the
shaman was someone who had cured or could probably cure them if they were
[861] sick. The exception recalled that her parents had once threatened to call an
Indian doctor to punish her if she did not behave. Adults believed this change
in educating the young was mainly a consequence of eliminating those shamans
thought to be responsible for witchcraft; if "bad" Indian doctors were no longer
a threat, there was no reason to be afraid of them. In addition, the formal
education of the boys and girls in integrated schools and attention to mass
communication media -- particularly the movies -- must be considered as
possible influences that undermined beliefs of the children in witchcraft.

178 Given this situation of an increase in frustrations during childhood and
154 an elimination of the means by which aggression was expressed in the past,
[152] the question of what had happened to the aggressive impulses of the Washo
arose. How had education acted as a connecting link between increasing frus-
trations and the socially acceptable methods for canalizing aggressions now
that witchcraft had left the scene? As far as we were able to ascertain, the
178 connection was not being made. The Peyote Cult, which helped to dispose of
the shamans, might have served as a satisfactory replacement for the expres-
154 sion of aggressions. For example, Merriam and d'Azevedo (1957, 617) pro-
668 vide several illustrations of Peyote members expressing hostility in ways
reminiscent of the days when witchcraft beliefs were rampant:

> "Individual Peyotists accuse one another of causing sickness or death under guidance of malicious spirits, or of secretly making use of Peyotist ritual, song, and medicine as a screen for acquiring personal advantage in 'the old way.'... Deaths of members or too-frequent failure to cure result in suspicion and the eventual rejection of a leader." 178 154 668 [754]

Again, Peyote singers carried on a rivalry with one another which "seems to be one means by which hostility is expressed among Peyotists" (Merriam and d'Azevedo, 1957, 625). [533] [578]

Peyotism, however, had failed to take hold, in Dresslerville at least, by the time of our field study. The members of this community did not appear to have had sufficient time to work out effective means for redirecting their aggressions in a socially acceptable manner.

Instead the aggression was internalized, the very thing that canalization is believed able to avoid.[2] This internalization was evident in certain self-destructive activities, though in each case the evidence was questionable and may be accepted only with qualification. Such evidence includes the high incidence of heavy drinking, though a comparative measure with the 1930's was lacking; the increasing harshness of the socialization process, though "taking it out" on one's children as an indication of internalized aggression is open to question; and a decreasing interest in tribal affairs, which could be interpreted as a lack of concern by the Washo about themselves and their future. The fact that many young men had left the community may also be an indication of internal conflicts that they were unable to resolve in any satisfactory manner. Suicide, of course, would have been a clear measure of such a conclusion, but, again, records were not available for comparison between the 1930's and the time of our study. 154 [273] [861] [829] [762]

We can thus tentatively conclude, given the nature of our evidence, that Nadel's suggestion, that witchcraft beliefs impede the integration of a society and add to the stress of social life, does not appear to hold true for the Washo case. 114 154 754 178

In this paper, the cultural changes that took place among the Washo over a 15-year period were used to support the contention that witchcraft beliefs may fulfill a positive function in displacing aggressions. Support for this conclusion was drawn from the consequences of the elimination of "bad" shamans. We also attempted to demonstrate how education may be considered as an intervening variable between frustrations and the socially acceptable means for releasing aggressions. The significance of cultural transmission from one generation to the next has always been implicit in any 121 128 154

[2] [footnote appears on p. 66 -- Analyst]

121 cultural study concerned with process, but the explicit investigation of educa-
128 tion as an adjustive mechanism, as an instrument for replacing institutions
154 with new ones in a situation of cultural change, still requires further attention. In the case of the Washo one of the functions of education had broken down, at least for the time being; aggressions were not being redirected toward acceptable scapegoat objects, nor were there opportunities to express them in any other way. The fear of witchcraft and antagonism toward sorcerers had not been replaced, and aggression had been internalized in a seemingly self-destructive fashion. The problem was epitomized in an answer given by a young boy when asked what he would like to be when he grew up. He replied, "An Indian" -- as in the movies. Whether the Washo can retain their cultural identity and still develop institutional outlets for their aggressions, or find some other means besides the self-defeating ones they had at the time we visited them, remains to be seen.

Notes

114

1. An abridged version of this paper was read at the meeting of the
128 Central States Anthropological Society, May, 1957. My thanks are due Alan P. Merriam for his helpful criticisms of an earlier draft of this paper.

154 2. Erikson has stated that if an individual cannot release his aggressions, they "can only turn inward to threaten the aggressor himself" (quoted in Kluckhohn, 1944, 51).

113

Bibliography

Dollard, J., et al
1939 Frustration and Aggression. Yale University Press, New Haven.

Downs, James F.
1961 Washo Religion. University of California Anthropological Records, Vol. 16, No. 9.

Eggan, Dorothy
1950 The General Problem of Hopi Adjustment. In Personality in Nature, Society and Culture, C. Kluckhohn and H. A. Murray (Eds.), pp. 220-35. Alfred A. Knopf, New York.

Goldfrank, Esther S.
1945 Socialization, Personality, and the Structure of Pueblo Society. American Anthropologist, Vol. 47, No. 4, pp. 516-39.

Hallowell, A. Irving
1955 Aggression in Saulteaux Society. In Culture and Experience, pp. 277-90. University of Pennsylvania Press, Philadelphia.

Kluckhohn, Clyde
1944 Navaho Witchcraft. Peabody Museum Papers, Vol. 22, No. 2.

Lowie, Robert H.
1939 Ethnographic Notes on the Washo. University of California Publications in American Archaeology and Ethnology, Vol. 36, No. 5.

Mead, Margaret
1942 Educative Effects of Social Environment as Disclosed by Studies of Primitive Societies. In Environment and Education (Supplementary Educational Monographs, No. 54), pp. 48-61.

Merriam, Alan P., and Warren L. d'Azevedo
1957 Washo Peyote Songs. American Anthropologist, Vol. 59, No. 4, pp. 615-41.

Miller, Neal E.
1941 The Frustration-Aggression Hypothesis. Psychological Review, Vol. 48, pp. 337-42.

113

Nadel, S. F.
1952   Witchcraft in Four African Societies: An Essay in Comparison. *American Anthropologist*, Vol. 54, No. 1, pp. 18-29.

Scotch, Norman A.
1957   *A Methodological Model for the Anthropological Study of Disease: Essential Hypertension in Three Societies.* Ph. D dissertation, Northwestern University, Evanston.

Siskin, Edgar E.
1941   *The Impact of the Peyote Cult upon Shamanism among the Washo Indians.* Ph. D dissertation, Yale University, New Haven.

Spiro, M. E.
1950   *The Problem of Aggression in a South Sea Culture.* Ph. D dissertation, Northwestern University, Evanston.

Stewart, Omer C.
1944   Washo-Northern Paiute Peyotism. *University of California Publications in American Archaeology and Ethnology*, Vol. 40, No. 3.

SOCIAL FACTORS IN HYPERTENSION AMONG THE WASHO[1]

by Norman A. and Freda L. Scotch

158
121

Essential hypertension, accounting for 85 to 95% of all hypertension, is a disease of unknown etiology. Many factors have been studied in relation to its development, among them, 1) heredity, 2) constitution, 3) diet, and 4) social and psychological stress. It is unlikely that any single factor is wholly responsible for hypertension, and medical scholars currently view the disease from a multi-causal framework.

For at least three decades physicians have suspected a relationship between social factors and the presence or absence of hypertension, or elevated blood pressure. This suspicion has not been buttressed by substantive research, at least until recently, so that systematic research on the possible relation of social factors to the disease is highly desirable. On the other hand, cross-cultural studies of blood pressure measurements have been carried out among many societies throughout the world. Though these studies are not always strictly comparable for a variety of reasons (e.g., different criteria for hypertension, different instruments, sampling problems, etc.) they do give some indication, at least, of the distribution of blood pressure levels throughout the world. Thus one can rate societies on the basis of mean blood pressure levels. Furthermore, one can refer to actuarial studies of the normal limits of blood pressure levels in order to evaluate whether or not the mean levels are "pathologically" high; that is, whether such levels are indications of increased morbidity and mortality.

[114]

This paper reports the findings of a pilot study undertaken by the authors among the Washo Indians in the summer of 1954. The whole project was conceived as a small-scale forerunner of a later, larger study to be conducted in South Africa, the results of which have been published elsewhere (Scotch, 1960). Because of the exploratory nature of the Washo research, plus certain methodological difficulties, the findings must be interpreted with caution.

Methods

124

Material for the analysis that follows comes chiefly from interviews conducted among Washo adults during which certain social data were collected (religion, employment, education, etc.). Blood pressure determinations were

Blood pressure determinations were
126
141 made by the senior author at least three times during each interview, at five
minute intervals. Heights and weights were also determined. Interviews
124 were conducted in the homes of respondents.

124 It was hoped at the outset that each adult member of the three Washo
114 communities of Dresslerville, Woodfords and Carson City would be included
in the survey. However, the pressures of time limited the series to 100 persons, representing approximately 30% of the adult population of these three communities. All but two or three of the Washo contacted agreed to participate in the study. Nonetheless, the possibility that the interviewed group was biased in some manner, such as being more geographically accessible and therefore socially "different" from non-contacts, suggests that results be interpreted with caution.

147 For the analysis that follows, a diastolic blood pressure, taken during
128 the initial interview, of 90 mm. Hg. or more was defined as an indication of
hypertension. Tests of significance used in the analysis are based on Chi squares or T-tests. Findings significant at or beyond the 10% level of confidence are reported.

Results

147 The mean blood pressure levels of the Washo studied are set out in
158 Table I by age and sex. It will be noted that in this sample blood pressure
increases with age, that the males have higher pressures in the younger ages and the females higher pressures in the older ages. Further, Washo blood pressures are high in terms of the criterion traditionally used as an indication of hypertension -- a reading of 90 mm. Hg. or more for the diastolic -- as indicated by the fact that the mean pressures, particularly of the older groups, are either very close to, or above, the upper limits of "normal."

TABLE 1

Mean Blood Pressures, by Age and Sex, for Washo Indians

147

Age	Males	N	Females	N
25 and below	124/79	(5)	119/78	(12)
26 - 45	137/90	(15)	122/78	(20)
46 - 65	133/88	(13)	146/88	(13)
66 and above	157/91	(8)	158/90	(8)
TOTAL	138/91	(43)	132/82	(53)

Nine variables were selected for analysis in terms of their relation to the presence or absence of hypertension. Six of the nine were associated with hypertension at, or better than, the 10% level of significance: 147 157 121

1. Age. Increasing age was associated with an increase in the percentage of elevated blood pressures.

2. Sex. Males have a higher percentage of elevated pressures than do females.

3. Obesity. Using standardized criteria the sample was divided into three groups: normal, overweight and obese. There was a significant increase in the percentage of elevated pressures from the normal to the overweight to the obese groups.

4. Education. The sample was divided into three groups: those who attended schools in the white community, those who attended boarding schools for Indians, and those who had not attended formal schools. The percentage of elevated pressures was highest in the first group and lowest in the last, the differences being statistically significant. No significant statistical association was found between blood pressure and amount of education. [871]

5. Alcoholism. Data were collected on 43 of the males as to whether they were observed by the authors to be frequently drinking or drunk, and whether or not certain key members of the community considered them to be "heavy drinkers." For purposes of analysis they were divided into two groups: [273]

147
158
121 alcoholic and nonalcoholic. The alcoholics were found to have a significantly higher percentage of elevated blood pressures than the nonalcoholics.

[273]
[77] 6. Religion. Members of the sample were questioned concerning their religious affiliation and were placed into three categories: none, Christian (mostly Baptist), and Peyotists. Though there was little difference in hypertension between the Christians and those with no preference, both groups had significantly more elevated pressures than the Peyotists. Three variables did not reach the 10% level of significance.

[177] 7. Residence. Of the three Washo communities studied it was felt that Dresslerville and Carson City represented the greatest degree of acculturation to the dominant white culture, and Woodfords the least. Assuming that stress accompanies acculturation (an assumption not always warranted), we predicted that Dresslerville and Carson City would have a higher prevalence of hypertension than would Woodfords. This was in fact the case but the differences among the three communities were not statistically significant. The prevalence of elevated diastolic blood pressure was 38% in Dresslerville and 30% in Carson City, whereas it was 28% in Woodfords.

[463] 8. Occupation. Hypertension was related neither to type of occupation (ranch workers or construction workers) nor to the difference between seasonal and full time employment.

[623] 9. Involvement in Tribal Council. Past and present office holders of the Washo Tribal Council showed a tendency to have a lower percentage of elevated pressures than other Washo, but this difference did not reach a level of statistical significance.

Because it was felt that some of the associations between elevated blood pressure and selected variables might be due to relationships among variables, a correlation matrix was computed for the six significant independent variables in addition to the dependent variable, elevated blood pressure. The six variables were again found to be significantly related to blood pressure at or beyond the 10% level. Of fourteen intercorrelations, three other sets of statistically significant relationships were found: sex with age, Peyotism with alcoholism and age with school type. Since the males were found to be older than the females this difference may account for the earlier finding of a male preponderance of hypertension. The correlation between Peyotism and alcoholism is negative, and is expected, since membership in the Peyote church is supposed to preclude drinking. Finally, the correlation of age with school type (younger Washo attended the white schools, and older Washo, no school) is also expected since "integrated" schools are a relatively recent innovation in Nevada. Nonetheless, since it had already been

147
shown that increasing age is associated with increasing percentages of hyper- 158
tension, the correlation of younger age with white schooling would tend to blur 121
real blood pressure differences between the groups with different educational
experiences. To put it another way, the finding that Washo students from
white schools had more hypertension than others occurred despite the fact
that these were younger Washo, whom we would normally expect to have lower pressures.

Discussion

The long standing hypothesis that stress is associated with hyperten- 158
sion, possibly figuring in its etiology, is supported by the data in the present 147
study. The fact that Washo blood pressure levels are high either when compared to acceptable normal limits, or to mean levels of other societies throughout the world (for a discussion of comparisons of mean blood pressure levels of the Washo with those of a number of other groups, see Scotch, 1957,
42, 93) may be attributed under this hypothesis to the stresses to which the [735]
Washo are subject. Chief among these are poverty and the discrimination [648]
the Washo face as an extremely small minority group within the dominant
white culture of Nevada. Furthermore, gainful employment is extremely dif- [464]
ficult to get, first, because there are so few jobs available in Nevada that do
not involve gambling enterprises and, secondly, because of discrimination.
Further, attempts by the Bureau of Indian Affairs to alleviate the economic 158
situation by such schemes as the relocation plan had met with complete re- 648
jection at the time of the study. To our knowledge, not a single Washo had 735
agreed to be relocated despite the many attractive features of the plan. When 147
Washo were interviewed concerning their reluctance to relocate, their typical attitude might be expressed:

> "Things are bad enough here where we only have to associate with whites for limited periods of time, but at least we continue to live within the tribe. We maintain many of our customs, and we know and understand our neighbors. But if we agreed to move to a new city we would be torn from our land and tribe and we would have to compete with whites on the whites' home grounds. It is better to suffer from poverty in a situation we are familiar with than to take a chance to make a decent living but live in an unfamiliar situation."

With this kind of attitude is associated a rather pessimistic world view. [829]

147 158 The stress hypothesis gains additional support from the relationship of selected variables to hypertension. The six variables found to be significantly related to hypertension represent a mixed bag. Age, sex and obesity are biological variables for the most part, whereas religion, education and alcoholism are social. This is not surprising if one accepts the current view of hypertension as a multi-causal disease. Additionally, the kinds of associations found do not necessarily imply causation. A great deal more epidemiological research must be carried out before we can begin to understand the etiology of hypertension.

With regard to the specific variables studied, the relationships between sex, age, obesity and elevated blood pressure merely support similar findings in the great bulk of studies reported for other societies. The other three variables, however, are of greater interest, particularly as regards the stress hypothesis.

147 158 871 648 It has been indicated that attendance at white schools is positively associated with hypertension, in contrast to attendance at Indian boarding schools, or no formal education at all. It can be argued that attending a white school is a stressful experience for a Washo and, extending the argument, that this stress later reflects itself in increasing blood pressure. Why is such schooling thought to be stressful? In the first place, several of those who have undergone this experience seem to feel it was. Several Washo have expressed bitterness, if not hostility, regarding the treatment they felt they received not only from the teachers of these schools but from the parents of fellow white students as well. It is of some incidental interest that in general these feelings did not extend to the white students themselves but only to their parents. This subjective evaluation of their educational experience seems warranted in the light of the objective situation. According to one white high school principal, Washo students, particularly in the past, did poorly in their studies in contrast to the white students. Furthermore, the principal corroborated the prejudiced feelings of white parents who, in his experience, had objected to the Washo's being allowed to attend the school in the first place, and have since objected to any sort of extracurricular activity that would allow the Washo to associate socially with white children. Interviews with members of the white communities of Minden and Gardnerville, the two white communities closest to Dresslerville, clearly indicate that for the most part these people do not have a high regard for the Washo and do not appreciate their attendance at the same schools. These indications seem to constitute a good case for the stressful nature of the educational experience.

147 158 273 Alcoholic behavior can be interpreted as stressful on two counts: first as a reflection of underlying psychological stresses and anxieties, and second as generating further stress in the form of reaction from white and

Washo society. In other words, the fact that particular Washo become alcoholics indicates certain personality problems of a stressful nature. Once having become alcoholics they are faced with further problems. Other Washo tend to look down on the alcoholics, who then become the subject of malicious gossip for giving a "bad name" to the Washo. In this way, alcoholism, which has been shown to be related to hypertension, may seem to reflect stress. 147 158 273

In contrast to education in white schools and alcoholism, membership in the Peyote cult is seen to be related to normal blood pressures, or an absence of hypertension. Here one can speculate that membership in the Peyote movement tends to be stress-reducing. The psychological and social functions of reform movements such as Peyote have long been noted. For example, Voget (1956, 259) states that these movements: 147 158 668 154

> ". . . perform a number of important functions in the continuing development and adjustment of the Indian. By providing Indians with a legitimate base for the evaluation of Indian ways, a new dignity and self-confidence emerges. The sense of inferiority and unworthiness which grips the Indian gives way to a bolder and more confident outlook, and he is enabled to face contemporary issues without immobilizing anxiety."

Our own observations among the Washo support Voget's contention. The Washo Peyotists did appear more stable and considerably less anxious than non-Peyotists. Thus the finding that the Peyotists have significantly less hypertension than the other Washo is of some interest.

On the basis of the limited data presented above it may be stated in summary that (1) variables related to social stress are also related to hypertension, and that (2) variables related to attempts to counteract such stresses are also related to an absence of hypertension. This interpretation must, of course, be considered tentative, particularly in view of the failure to find significant relationships between hypertension and some of the variables thought to be important, such as type and continuity of employment. 15

Studies of social factors in hypertension are currently underway in several societies throughout the world. It is hoped that findings from these studies shed additional light on the nature of the relationship of culture to this disease. 158 171

Notes

114

1. This paper is based on materials appearing in the doctoral dissertation of the senior author (An Anthropological Study of Essential Hypertension
122 in Three Societies, Northwestern University, 1957). The authors wish to thank the Graduate School, Northwestern University and the Cardiovascular Research Department of the Michael Reese Hospital, Chicago, for generous financial support which made the field work on which this paper is based possible. Thanks are due for the advice and support of Dr. Jeremiah Stamler, Professor M. J. Herskovits and Professor William Bascom.

Bibliography

113

Scotch, Norman A.
1957 *An Anthropological Study of Essential Hypertension in Three Societies*. Ph.D dissertation, Northwestern University, Evanston.

1960 A Preliminary Report on the Relation of Sociocultural Factors to Hypertension among the Zulu. *Annals of the New York Academy of Sciences*, Vol. 84, Art. 17, pp. 1000-9.

Voget, Fred W.
1956 The American Indian in Transition: Reformation and Accommodation. *American Anthropologist*, Vol. 58, No. 2, pp. 249-63.

WASHO PREHISTORY: A REVIEW OF RESEARCH

by John A. Price

Anthropological research dealing with the Washo Indians and their aboriginal territory has produced a considerable body of descriptive data, much of it amassed in the past decade. This paper will review that portion of the data pertaining to prehistory in Washo territory.[1] 121

Washo territory in the middle 1800's centered on Lake Tahoe in California and Nevada and the areas immediately to the north, east and south. Except for occasional wider ranging for gathering or trade, Washo territory extended from the south shore of Honey Lake south to Sonora Pass and the West Walker River in California. East to west their territory extended from the Pinenut Mountains in Nevada to several miles west of the main crest of the Sierra Nevada in California. 131

The physical environment of Washo territory is marked by its variety of climate, flora and fauna resulting from the variations in altitude which occur within a comparatively small area. The Sierra Nevada, a great tilted block, rises gradually to the east of the central valley of California from near sea level to peaks over 10,000 ft. in altitude and drops abruptly on its eastern slope in Nevada to around 5,000 ft. in elevation. 13 133

The Washo territory is characterized by yellow pine and fir vegetation in the highlands and by pinyon and juniper in the lowlands, ranging through Boreal, Transitional and Upper Sonoran life zones. A humid microthermal climate with 20 to 35 in. of precipitation annually obtains in the mountains while an arid cold-steppe climate is found in the low valleys. In the mountains the summers are warm with rains through July, snows starting in November, and cold weather with freezing nights until April. Snow often reaches more than 15 ft. in depth in some places in the mountains. 137 132

There are several estimates of Washo population. Fairfield (1916, 13-14) wrote that "In 1859 Major Dodge, the Indian Agent, reported that they number about 900"; Kroeber (1925, 944) estimated around 1500 for A.D. 1770; Lowie (1939, 301) wrote that "recent figures indicate approximately 300"; and Merriam and d'Azevedo (1957, 615) wrote that "Present population is variously reported at between 400 and 1000 individuals; the figures on file at the Nevada Indian Agency in Stewart, Nevada, support the larger estimates." 161

[1] [for an additional note regarding the preparation of this paper, see p. 92 -- Analyst]

102
131
133
172
361

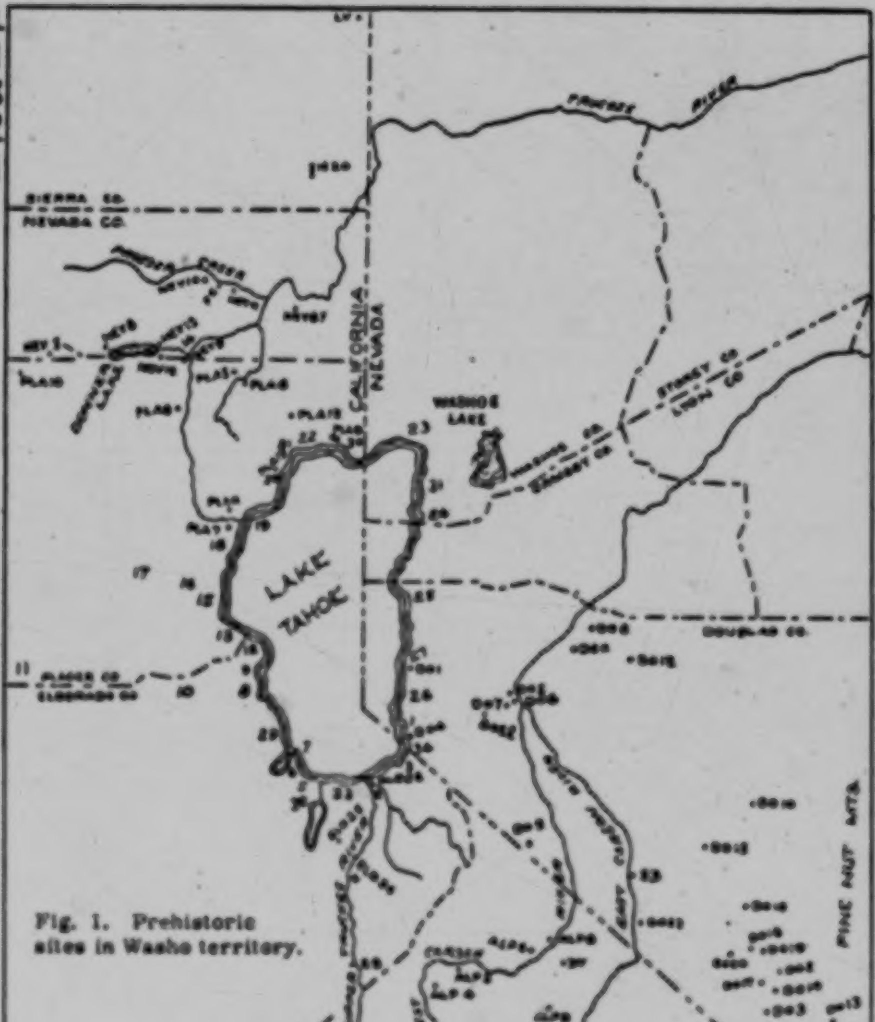

SIERRA CO.
NEVADA CO.
TRUCKEE RIVER
CALIFORNIA
NEVADA
WASHOE LAKE
STOREY CO.
LYON CO.
WASHOE CO.
LAKE TAHOE
PLACER CO.
ELDORADO CO.
DOUGLAS CO.
ALPINE CO.
PINE NUT MTS.
TOPAZ LAKE
CARSON

Fig. 1. Prehistoric sites in Washo territory.

The Washo speak a Hokan language; their neighbors to the east, the Northern Paiute, speak a Utaztekan language; the Maidu and Miwok to the west are Penutian speakers. The Hokan languages are widely scattered from California through Mexico and into Central America, and are considered to be among the oldest languages in California. The lexicostatistics of Hokan indicate that Washo separated from Yana, only 60 mi. northwest of the Washo, 5000 years ago. 197 [174]

Kroeber (1955) wrote that "It is evident that the geographical proximity of Yana and Washo is a secondary and recent affair, and that they have been separated not only for a long period but, probably, by a considerable geographical interval for much of that time. Washo in fact proves to have been split off from every other computed Hokan language for 45C or more." 174

Lamb (1958) shows linguistic evidence for the presence of the Proto-Utaztekan people around the Arizona-Sonora, Mexico, region 5000 years ago. After several splits and migrations within the language family there was a general movement north and eastward by the Shoshonean division about 1000 years ago, a movement that was still in progress 500 years ago. In the 1800's the Shoshoneans were the principal language group present in the Great Basin. Linguistic data suggest, therefore, a pattern of Shoshonean contacts over a long period of time which is important in any interpretation of Washo prehistory.

In contrast to the linguistic differences, the Washo appear to be closely related racially to the surrounding tribes. At least, according to the anthropometric study made by Gifford in 1926, the Washo are included with Northern Paiute, Miwok, and many other groups in his "narrow-nosed subtype" of the "Californian type." This similarity is also suggested by the work on Great Basin population by Kennedy (1959). 144

The Washo are culturally, as well as geographically, between eastern California and Great Basin tribes. Barrett (1917) pointed out Washo relationships on both sides of the Sierra Nevada with Californian affinities indicated by the conical house, bedrock mortar, soaproot brush, coiled basketry with descriptively named geometric patterns, and acorns as a food. Heizer and Elsasser (1953, 4) added language affiliation, looped withe hot rock lifter, and flat mush stirring paddle to this list. 171 [197]

Heizer and Elsasser (1953, 4) state that "affiliations of Washo culture with that of the Shoshonean tribes to the east in the Great Basin proper are: long net for catching rabbits by driving techniques; special 'boss' for rabbit and deer hunt; rabbitskin blanket; heavy dependence for food on nuts of piñon (Pinus monophylla) with the complex of implements and activities used to

171

secure and prepare these (hooked pole, roasting of nuts, carrying baskets); mano and metate; twined basketry techniques and basket form (e.g., winnowing trays); temporary brush house; antelope hunting method by 'charming'; private ownership of clumps of piñon trees."

361 Washo winter use of the highlands had been of research interest in
311 recent years. In an archeological survey report Heizer and Elsasser (1953,
[172] 18) state that "permanent occupation at elevations over 5500 feet in prehistoric times would be hazardous or impossible." Continuing the project,
[133] Elsasser (1960, 26) considered 4000 ft. the approximate dividing line between summer and winter habitation for the California side, and he stated that "In aboriginal times . . . little or no land, even at the highest elevations was unknown to the Indians." From ethnographic evidence Freed (1954, 1) stated in reference to Lake Tahoe (6275 ft. elevation), that "If there was to be no pine nut crop, a family might choose to winter at the lake."

The Freed Survey of Lake Tahoe

172

Freed (1954) conducted a survey of Washo habitation sites in the Lake
[114] Tahoe area by interrogation of Washo informants. The map accompanying the present paper gives the location of sites discussed and mapped by Freed.
[124] The sites are numbered 1 through 31 (see note 2 for further discussion of the map).

[317] Freed's site #6 is a deposit of red clay near the lake; #10 is at Rubicon Springs (the mineral water of which was used for internal disorders),
[312] which was on a trade route into central California; #16 is a cave at the foot of Stanford Rock where hunters sometimes stayed; #17 is a camp among oak trees; #27 (26-Do-1) is the cave at Cave Rock used for shelter; and #29, #30
172 and #31 were resting places rather than campsites. The rest of the sites were used primarily in connection with fishing, although hunting and gather-
226 ing were additional considerations. Freed (1954) says:

[221]

> "The Washo spent the summer months fishing in the streams around the lake, each family moving to another river whenever it saw fit but usually confining itself to a particular section of the lake's perimeter . . . the camps were usually in open spaces
> [342] close to the lake shore. . . . A camp might consist of five or six circular windbreaks (gadu), each housing a family.

> "A permanent bedrock mortar was near each camping site . . . portable property was scanty. It was a hard climb from the valley to the lake and the Washo took mainly bows and arrows, a mano and metate, a few necessary baskets and their fish harpoons. . . . The fish were speared from a fish blind. . . . At a suitable place on a stream the Washo would build a stone dam fine enough to catch everything except small minnows."

172
226
[412]
[484]
[922]

One thing to note here is that the Washo were stream fishers. They never went out onto the lake with rafts or boats of any kind and they never used a hook and line from the shore.} The hook and line is reported for stream fishing, but was not nearly as important as spearing and netting. The balsa boat was used on Washoe Lake to drive young ducks, but was never taken to Lake Tahoe.

172
226
501
[223]

The d'Azevedo Survey

In 1955 and 1956 d'Azevedo collected the names and descriptions of 249 habitation sites and geographical locations in the extended territory used by the Washo. Though not published, much of this information has been made available through the files of the California Archaeological Survey at Berkeley, and the present writer has made frequent reference to an unpublished manuscript (d'Azevedo, 1956) containing this material.

172
[127]

The survey is similar to Freed's survey for Lake Tahoe except that it presents a systematic coverage of Washo land-use and knowledge of terrain, rivers, lakes and natural resources over an area of about 13,000 sq. mi. This knowledge is so intricately woven into Washo folklore and mythology that a long tenure in this region is indicated for them. Furthermore, it would appear that the territorial "boundaries" now designated for the Washo ignore large areas in California which they at least shared with the Miwok and Maidu, and areas to the east which were shared with the Paiute.

[311]
[823]
[131]

The Heizer and Elsasser Survey

Heizer and Elsasser (1953) reported on 26 sites in their archeological survey of the high Sierras in the vicinity of Lake Tahoe. Two similar yet distinct archeological complexes were seen in the materials from their survey -- Martis and Kings Beach. The Martis complex type site is Pla-5 in Martis Valley, along Martis Creek, about 5 mi. northwest of Lake Tahoe.

}[footnote appears on p. 93--Analyst]

172

The Kings Beach complex type site, Pla-9, runs along the beach of the northern shore of Lake Tahoe in the vicinity of the towns of Kings Beach and Tahoe Vista.

Although Martis complex materials were not found stratigraphically below Kings Beach materials, the Martis complex was assigned a much earlier date. These authors suggest (1953, 21) that "the Martis Complex may have flourished some time in the first two millennia B. C. " while the Kings Beach complex is equated with the historic Washo and "had a relatively shorter duration and perhaps 1000 A. D. is about all the age we can now assign to it. "

[312] The great time depth of Martis was assigned on the evidence of the use of basalt for flaked implements and the recovery of a boatstone (boat-shaped spear thrower weight) at the Martis type site. Since their report another boatstone has been found at Dangberg Hot Springs (Do-8) at a depth of 18 in. This hot spring was a favorite Washo campground, and has yielded a number of artifacts of both the Martis and Kings Beach complexes.

[361] Heizer and Elsasser (1953, 22) explain the lack of stratified sites in their highland survey as based on "a tendency for people to settle in a spot which has not before been used. " Their evidence is mainly that the sites are in open areas and that local supernatural beliefs indicate a fear of previously occupied spots. This tendency clearly breaks down in the case of spring sites in the lowlands.

The following elements are listed for the two complexes:

Martis

"1. Basalt preferred material for chipped implements.
2. Obsidian and chert used very rarely.
3. Projectile points fairly large and heavy, roughly chipped, variable in form.
4. Mano and metate for seed-grinding.
5. Cylindrical pestle and bowl-mortar (?).
6. Boatstones (and atlatl ?).
7. Economic emphasis on hunting and seed using.
8. Basalt flake scrapers with pressure-retouched edge abundant.
9. Expanded-base finger-held flaked drills or punches common.

Kings Beach

"1. Obsidian and siliceous flint preferred for projectile points.
2. Basalt used very rarely for chipped implements.
3. Bedrock mortar for seed-grinding (site Eld-24, Eld-25).
4. Projectile points small, light, side-notched.
5. Economic emphasis on fishing and seed-using.
6. Probably ascribable to late prehistoric Washo tribe.
7. Bow and arrow offensive weapon (inferred).
8. Scrapers rare; drills absent."

Martis complex sites are Pla-5, 6, 7, 8, 11, 12, 13; Nev-8, 9, 10, 11, 12, 13; and Alp-5. King Beach complex sites are Pla-9, 10; Eld-24, 25, 26; Alp-4, 6, 7, 9; Plu-7; and Do-1.[2]

The separation of these sites into two complexes appears to be warranted, but the classification is not always consistent. For example, a Desert Side-notched (DSN) projectile point was found at the Martis site Pla-6 (excavation by G. Arnold in 1957) at the 18-24 in. level (Elsasser, 1960, 71). The DSN point is characteristic of Kings Beach and yet was found at depth in a Martis site. Also, Elsasser (1960, 38) excavated Nev-18 and found three DSN points stratigraphically below Martis points.

Sites in Douglas County, Nevada

With the exception of Do-1, none of the sites of the Heizer and Elsasser survey mentioned above were in Nevada. A number of sites have been added recently to the University of California Archaeological Site Survey Records for Douglas County, Nevada, by George E. Haigh, Albert B. Elsasser, Robert F. Heizer and Gordon L. Grosscup. Since this material has not been published, a brief description of each site is given below. When the California records are incomplete this writer has made the appropriate additions.

Do-2 was an important Washo winter campground around a spring where a crescent and a scraper plane were found. The Schubert collection includes a 7 1/2 in. bifacial mano from the site.

Do-3 is a smoke-blackened rock shelter where a historic trade bead, a mano, a metate, and obsidian and chert chips were collected by the University of California Archaeological Survey. The Schubert collection (see below) includes two mortars about 5 in. in dia. and an oval mano of the same length.

172

[103] D'Azevedo recorded the Washo name "haŋawuywuyanal" for this site. William C. Brown excavated a portion of this site in 1960 for the Nevada State Museum.

Do-4 is a bedrock mortar site, probably the same as #1 from Freed's Survey.

Do-5, 6, and 7 are three large sites in a group, where stone chips, broken metates, bits of shell, metates, manos, hundreds of projectile points, a piece of worked bone, a charmstone and a human skull were found. A local collector has also reported finding a round blue glass bead here.

Do-8 is a campsite below a hot spring where a local collector found a boatstone at a depth of about 18 in. The boatstone was donated to the Nevada State Museum.

Workshop chips and points were found here by the University of California Archaeological Survey along with broken metates and manos. This site was excavated by S. M. Wheeler for the Nevada State Park Commission in 1939. The site yielded projectile points, bones, scrapers and a mano.

• W. L. d'Azevedo's notes report that the site seems buried under sand with most of the artifacts found on the slope near the hot stream. The Schubert collection from this site contains 3 manos, 1 drill, 4 scrapers, 6 blades and the following projectile points: 4 DSN, Martis types 1b-2, 3c-2, 4c-1, and 5c-1; 3 small leaf-shaped; 1 triangular; 1 small side-notched with a convex base; 1 small barbed with a concave stem; and 2 shouldered with flat based stems.

Do-9 is a bedrock mortar site beside a small creek.

Do-10 is a campsite where several points, a basalt scraper, workshop chips and a bedrock mortar were found.

Do-11 is a campsite where approximately 50 points and numerous workshop chips were found.

Do-12 is a campsite below a hot spring. Elsasser (1960) excavated this site and found Martis complex projectile points and other artifacts to a depth of 30 in. with one point recovered from a 48-51 in. level. The excavated materials and private collections from this site include 1 obsidian crescent, 1 mortar fragment, 1 stone discoidal, 1 bone awl, 1 bone dagger, 1 incised bone fragment, 2 unshaped pestle fragments, 48 manos, 40 basin metates, and 385 identifiable projectile points or fragments. One DSN point was taken from the surface, and 10 Humboldt Concave Base A, 2 Humboldt Basal Notched, and 1 B-11 (Yosemite) points were found within the first 12 in. of fill.

Elsasser suggests (1960, 60) that "The culture disclosed at Do-12 is an outlying manifestation of the Martis Complex" although "there seems to be a dearth of the crudely chipped basalt blades and scrapers which are so characteristic of the northern sites." He also suggests (1960, 59) that "the Tamarack Complex, in Yosemite National Park, appears to be the candidate for the successor or at least the representative of the terminal Martis period in the Carson Valley."

Do-13 is a campsite where a 93 year old Washo woman, Susie Dick, now residing in Minden, used to live with other families when she was young (around 1885). Later on she moved to Double Spring (Do-2). The Schubert collection from this site includes 8 scrapers, 1 point fragment, and 1 basalt side-notched point (Martis type 4a).

Do-14 is a campsite on a mountain slope northwest of Do-13.

Do-15 is a burial site.

Do-16, 17, 18, 19, 20, and 21 are Washo campsites near pinenut gathering areas and streams or springs. Obsidian chips, projectile points, metate fragments, a bedrock mortar, and a chopper are among the artifacts found at these sites.

Do-22 is a bedrock mortar site near a spring with associated petroglyphs.

Do-23 is a campsite on a high terrace above a river where scattered chert and obsidian chips were found.

Other Recorded Sites

The author is aware of archeological sites in Washo territory recorded by the University of California Archaeological Survey and the Nevada State Museum in addition to those described above. These are principally in Ormsby and Washoe counties of Nevada, and Sierra and Plumas counties of California.

Sie-20 is an extensive campsite in Sierra County, California. Elsasser (1960) found that the surface collection and excavation here indicated another Martis complex site.

A number of sites have been found around Washoe Lake, Washoe County, Nevada. Schellbach (1927) described an extensive site to the east of the lake. Gordon L. Grosscup (personal communication) reported that the east shore of the lake consists, essentially, of one large sand dune broken by washes. Nearly every wash contains artifacts, and has been recorded as a site. The material (manos, metates and other artifacts) appears to come from a thin buried layer within the sand dune. There is also a bedrock mortar site near the south end of the lake.

Other sites have been reported for Washoe County near Steamboat Springs, on the mountain slopes west of Reno, and in Idlewild Park in Reno. Historic sources indicate an intensive Washo use of the Truckee River, so a survey should reveal the existence of sites there as well.

In addition to the recorded sites, there are many unrecorded archeological sites in Washo territory. Bedrock mortars are known to be located near the various contemporary Washo communities. Private collectors have also found a number of sites.

Private Collections

Three of the private collections of artifacts taken from Washo territory are reported here. These sites are indicated on the site map by initials, which are abbreviations of each site's locale.[2]

A. Juanita Schubert of Minden, Nevada, has a collection of 201 stone artifacts from 11 sites in Washo territory. Artifacts from sites included in the California Survey have already been listed. All the sites listed here, except the Sheep Bridge site, are in California.

1. The site that yielded the largest collection is near Prosser Creek (PC) and may be considered as part of the same group of sites as Nev-10 and Nev-11 reported by Heizer and Elsasser (1953, 7). The Schubert collection from this site contains 143 artifacts, all of basalt except for 11 obsidian and two chert pieces. The artifacts are essentially the same as those reported by Heizer and Elsasser. In a classification of this collection it was necessary to add the subtype "leaf shaped with square base" to the Martis classification by Elsasser (1960).

[2] [see footnote on p. 92-93 -- Analyst]

2. The Bagley Valley (BV) site is in a flat 1 mi. north of Heenan Lake and 1 1/2 mi. east of Monitor, California. Three projectile points 1 1/4 to 2 in. in length were found, one with a concave-sided blade and convex-based stem; one with a long blade, barbs, and an expanding stem; and one with large barbs and a contracting stem.

3. The Heenan Lake (HL) site is along the north shore of Heenan Lake. Two white chert scrapers, an obsidian blade, and 14 projectile points were collected here. The single basalt projectile point could be classified as Martis 4a. There are four DSN, 1 Humboldt Cave Base B, 1 rectangular, 2 leaf-shaped, 1 side-notched with a straight base, 2 shouldered, 1 with large barbs and no stem, and a 2 1/2 in. shouldered point with a serrated blade.

4. The Mokelumne River (MR) site is along the headwaters of the river 1 1/2 mi. southwest of Ebbetts Pass and 1 1/2 mi. down a dirt road south of State Highway 4. The collection of 35 artifacts from this site consists of 2 manos, 4 scrapers, 3 blades, 1 point fragment, a 6 in. point classifiable as Martis 1b, 6 DSN, 4 leaf-shaped with concave base; and obsidian and basalt forms classifiable as Martis types 1a-1, 3c-3, 3d-1, 4a-1, 4d-1, 5b-1, 5c-1, 5d-1, 5f-1, and 5g-1.

5. The Antelope Valley (AV) site is on the east side of this valley about 2 mi. southeast of the town of Topaz. A single white chert DSN point with a notched base was found here.

6. The Long Valley (LV) site is 2 3/4 mi. south of the town of Chats and 1/4 mi. west of U.S. Highway 395 on a foothill slope overlooking Long Creek. A 1 1/2 in. basalt drill and a 3/4 in. triangular point tip were found here.

7. The Sheep Bridge (SB) site is on the east bank of the East Carson River 1/4 mi. south of Horseshoe Bend. The collection from this site consists of a mano, five scrapers, and a blade.

B. Harry Hawkins of Markleeville, California, has a collection of artifacts from a Washo campsite along a stream on his ranch at the head of Diamond Valley (DV) and 1/2 mi. east of California State Highway 4. Mr. Hawkins' father remembered Washo camping at this site. The site contains 22 bedrock mortars.

The collection from this site consists of 37 points of less than 2 in. in length and two points about 3 in. in length. There are 2 leaf-shaped, 17 triangular with concave or straight bases, 8 shouldered, 1 small barbed, 1 stemmed with a concave-sided blade, 2 large barbs, and 8 DSN. A 3 in.

172 circular arrowshaft straightener of steatite with a slanting 1/2 in. hole through the center was found here and is in the Museum of Anthropology at the University of Utah.

C. Iva Ashurst of Topaz, California, has collections from two sites west of Topaz Lake (TL) and U.S. Highway 395 in Douglas County, Nevada, close to the Nevada-California state line.

1. A cache of 21 leaf-shaped obsidian blades was found, on the south slope of a wash about 30 ft. west of U.S. 395 and 1/4 mi. north of Topaz Lodge. The blades, which were found stacked flat, range in length from 3 1/4 in. to 7 7/8 in., in width from 1 5/8 in. to 3 in. Their mean length is 4 1/4 in.; mean width is 2 in.

2. At a site 1/4 mi. west of TL-1, and at the foot of the mountain west of Topaz Lodge, more than 1000 glass trade beads were found in an area about 6 by 6 ft. In one spot of this site was a deposit of wood ash where a number of the beads had melted together. The beads were found scattered throughout the first 6 to 8 in. of deposit and apparently covered an area the size of a house floor with a fireplace in the center. The beads may have been used as a cremation offering.

Historic Washo Artifacts

172
411

In the Nevada State Museum there are projectile points from the Dr. Lee collection made by two Washo Indians, Lame Tom and Poker Charlie. Most of these are of obsidian although some are of glass, basalt, chert, or white porcelain. In one typical display circle of 24 points 16 are side-notched, 7 shouldered, and 1 barbed. Most of the points are the General (obsidian, 0-26 mm., concave base) and Delta (not obsidian, 27+ mm., V-shaped base) subtypes of the Desert Side-notched (DSN) points as defined by M. A. Baumhoff and J. S. Byrne (1959). In a sample of 100 of these historic Washo points not one was of the Redding (bell-shaped base and comma-shaped notch) or Sierra (basal notched) subtypes of the DSN.

All of the modern Washo points presented by Heizer and Elsasser (1953, Fig. 1), and attributed to H. N. Rust, are the General subtype of DSN. The DSN points found in the 1953 survey by Heizer and Elsasser at the Kings Beach type site are the General or Delta subtypes, or some variant of them. Two of the DSN points found at Eld-24 may be Sierran. Of the 23 DSN points in the Schubert and Hawkins collections at least four are the Sierran subtype. Elsasser (1960) claims that the Sierran DSN occurs throughout the Sierra

Nevada at altitudes of 5000 ft. and above. There is an indication, therefore, 172
that although the Sierran subtype of DSN is occasionally found archeologically 411
in Washo territory, it was not made by recent Washo flint knappers.

The author's survey of historic and prehistoric bedrock mortar sites 172
indicates that recent Washo prefer a more shallow basin mortar than was 415
used previously. This was also suggested by a Washo woman, Bertha Holbrook, who said that the California Indians used much deeper bedrock mortars. Most of the recent mortar holes range from 1 to 2 1/2 in. in depth; prehistoric mortars in Washo territory range up to 7 in. in depth. Today a boulder [412]
of 3 to 5 lbs., with a rounded end, is used as a pestle. A 4 to 5 ft. high stick-and-cloth frame is constructed over the working area to protect the flour from wind and to provide shade.

Schellbach (1927, 400) reported a 6 5/8 in. ornamented bone awl-like 172
implement found on the east side of Washoe Lake, where "there is an extensive old Washo camp-and-village site. The prevailing winds . . . cause the 531
sand-dunes to shift, exposing broken fire-stones, flint chips, arrowpoints, bird and animal bones, and an occasional human skeleton." The ornamentation is along the flat surface of the tool as a series of small drilled dots in a pattern similar to a zigzag Washo basketry design.

Two handgame bones in the Dr. Lee collection at the Nevada State 172
Museum in Carson City came from the Fulston Ranch in Jack's Valley.

Petroglyphs

Steward (1929) categorized the petroglyphs and pictographs of Cali- 172
fornia, Nevada, Utah and Arizona into 50 motifs. On the basis of the distri- 531
bution of these elements he found four design areas. 532

Steward's Area A included California east of the Sierras, Nevada and lower California. Petroglyphs are predominant in this area; especially prominent are geometric elements with curvilinear designs and certain naturalistic elements. Area B includes Utah and Arizona and is characterized by specific bird, frog, lizard, and kachina-like human petroglyphs. Area C is the eastern part of southern California and is characterized by zigzag pictographs. Area D is the Santa Barbara-Tulare region and is characterized by pictographs in the form of elaborate lizards, "spoked wheels," "ladders," and "rakes." Concentric circles, wavy or zigzag lines, human figures, and a "sun disk" are found in all four areas.

172
531
532 A study by the author of the elements in 12 of the 23 petroglyph groups in or adjacent to Washo territory was made from Steward's data. This indicated that, although seven sites were included from California and only five from Nevada, the Nevada sites have a greater variety and larger number of design elements.

L. Arthur Payen (1959) reported that the petroglyphs in the area around Donner Summit were in the typical Great Basin style with a great variety of elements in zigzags, diamond series, human forms, animal forms, and "rain symbols." Payen postulated that the combination of pecking and rubbing is more frequent in the "Valley Sierran" style than in the Great Basin.

At the Lagomarsino Petroglyph Group near Virginia City, Nevada (26-St-1 or Steward's number 208), Baumhoff, Heizer and Elsasser (1958, 3) found that "The techniques employed in producing the petroglyphs were pecking, scratching, and rubbing, in that order of importance."

It was possible to demonstrate with statistical significance that two distinct art styles were present at the Lagomarsino site and a chronology was assigned to the two styles. Certain elements occur more often on the cliff face; others occur more often on the talus boulders. The "cliff face style" includes the elements of plant form, bird track, gridiron, rake, dots and crosshatching with a general tendency toward angularity. The "talus boulder style" includes the sun figure, polliwog, asterisk (or star), concentric circles, circle, and curvilinear line with a general tendency toward the curvilinear. Both styles are considered part of the Great Basin geometric style of Steward's Area A.

172 With a petroglyph style from the Grimes site (26-Ch-3 or Steward's number 207) at Fallon, Nevada, included as earlier, the following chronology of petroglyph styles was presented by Baumhoff, Heizer and Elsasser (1958).

1. Beginning some time before 7000 years ago. A groove-and-pit style now found heavily patinated at the Grimes site.

2. Beginning 3000 to 4000 years ago. Great Basin curvilinear ("talus boulder" at Lagomarsino) style found throughout the Great Basin.

3. Beginning about 1000 years ago. Great Basin rectilinear ("cliff face" at Lagomarsino) style found along the western margins of the Great Basin.

It is doubtful whether any of the petroglyphs mentioned here were made by the Washo Indians or their ancestors within the last 150 or more years.

The Washo, Northern Paiute, and other Great Basin Indians generally deny that they made petroglyphs. 172

Heizer and Baumhoff (1959) state that petroglyphs found along the Walker, Carson and Truckee rivers are generally lacking in associated occupational debris, are along routes of deer migration, and are probably connected with hunting magic. Baumhoff, Heizer and Elsasser (1958) found a slightly different picture for the Lagomarsino site farther away from game trails. For this site the hypothesis presented was that it was ideally situated for a summer or early fall camping spot and the petroglyphs were probably made by shamans, possibly seeking power or in food increase rites. The interpretation of petroglyphs as maps was deprecated. Kroeber (1958) suggests that if native art serves ceremonial purposes the act of presenting the symbols, rather than communication, was the important thing.

A petroglyph group, recorded by d'Azevedo (1956), in Carson Valley has associated occupational debris. This is at 26-Do-22 in Taylor Canyon west of Foothill Road in western Douglas County. D'Azevedo's Washo informants knew of the historic use of this site by Washo, but were unaware of the petroglyph group associated with it.

Summary Comments

Elsasser (1960) drew several conclusions from his survey and excavations in Washo territory. Five of his points are presented below.

1. The Martis complex was located in the north-central Sierra Nevada largely in the transition or mid-altitude life zones (optimum altitudes 2500 and 6000 ft., depending on the side of the mountain range, west and east, respectively).

2. The greater number of Martis complex sites are on the eastern side of the Sierra Nevada, possibly a result of more intensive survey on the eastern side.

3. There is (1960, 72) "evidence of the strong resemblance of Martis Complex points with those recovered from the Middle archaeological Horizon of central California . . . it remains possible that the known high- or mid-altitude Martis sites represent a summer occupation of a basically central Californian culture."

172 4. Although similar, Martis type artifacts are distinct from all other surrounding artifact assemblages.

5. Clear evidence for a culture that is transitional between Martis and Kings Beach is lacking.

The Washo, the earlier Kings Beach complex people, and the still older Martis complex people solved the problems of survival in quite similar ways. We suspect that they are the same people at different periods of time. Still, caution must be exercised in attempting to correlate archeological manifestations with ethnographic groups in the area.

172
174 The present writer tested the hypothesis that the Washo of the ethnographic present were closer to the archeologically known Lovelock culture than the Northern Paiute or Achomawi. This was done by comparing a list of 64 traits of Lovelock culture prepared by Grosscup (1954, 22-23) with the ethnographic trait lists by Stewart (1941) for Washo, Achomawi, and Tasiget Northern Paiute. This comparison showed that the three ethnographically known cultures were almost exactly equal in their similarity to Lovelock culture. It also showed that the material culture for the west central Great Basin was so similar that considerable caution is necessary in assigning a complex, a site, or a component to any particular historic tribe. In view of these facts it appears that extensive excavation, particularly of known Washo sites, will be necessary to confidently ascribe the Kings Beach complex to the prehistoric Washo.

Notes

122 1. A National Science Foundation Graduate Fellowship made it possible for the author to devote time to this study. Gordon L. Grosscup encouraged and aided this research with his criticism.

102
172 2. The map facing the title page represents the central portion of historic Washo territory. It was drawn to include archeological sites in Washo territory on which the author had information.

Sites from the survey by Freed are numbered 1 through 31. The University of California Archaeological Survey sites are designated by county

code and numbered sequence of their recordings, *i.e.*, Do-1 was the first site 102
recorded for Douglas County, Nevada. Sites from which private collections 172
were made are indicated by initials of each site's locale, *i.e.*, the Prosser
Creek site is indicated by P.C.

3. Lowie (1939, 327-8) reports the use of a cedar bark raft, 12-15 ft. 172
long by 10 ft. wide, that was propelled along the shore by a long pole used 226
for fishing on Lake Tahoe. If this was pre-white, it was rare because this 501
writer's informants knew nothing about it.

Bibliography

113

Barrett, Samuel A.
1917 The Washo Indians. *Bulletin of the Public Museum of the City of Milwaukee,* Vol. 2, No. 1.

Baumhoff, M. A., Robert F. Heizer and Albert B. Elsasser
1958 The Lagomarsino Petroglyph Group (Site 26-St-1) Near Virginia City, Nevada. *University of California Archaeological Survey Reports,* No. 43, Pt. 2.

Baumhoff, M. A., and J. S. Byrne
1959 Desert Side-Notched Points as the Time Marker in California. *University of California Archaeological Survey Reports,* No. 48.

d'Azevedo, Warren L.
1956 *Washo Place Names.* MS.

Elsasser, Albert B.
1960 The Archaeology of the Sierra Nevada. *University of California Archaeological Survey Reports,* No. 51.

Fairfield, Asa M.
1916 *Pioneer History of Lassen County, California.*

Freed, Stanley A.
1954 *Washo Habitation Sites in the Lake Tahoe Area.* MS, Department of Anthropology, University of California, Berkeley.

Gifford, Edward W.
1926 Californian Anthropometry. *University of California Publications in American Archaeology and Ethnology,* Vol. 22, No. 2.

Grosscup, Gordon L.
1954 *Northern Paiute Archaeology.* MS.

Heizer, Robert F., and Albert B. Elsasser
1953 Some Archaeological Sites and Cultures of the Central Sierra Nevada. *University of California Archaeological Survey Reports,* No. 21.

Heizer, Robert F., and M. A. Baumhoff
1959 Great Basin Petroglyphs and Prehistoric Game Trails. *Science,* Vol. 129, No. 3353.

Kennedy, K. A. R.
1959 The Aboriginal Population of the Great Basin. *University of California Archaeological Survey Reports*, No. 45.

Kroeber, A. L.
1925 Handbook of the Indians of California. *Bureau of American Ethnology*, No. 78.

1955 Linguistic Time Depths So Far and Their Meaning. *International Journal of American Linguistics*, Vol. 21, No. 2.

1958 Sign Language Inquiry. *International Journal of American Linguistics*, Vol. 24, No. 1.

Lamb, Sydney M.
1958 Linguistic Prehistory in the Great Basin. *International Journal of American Linguistics*, Vol. 24, No. 2.

Lowie, Robert H.
1939 Ethnographic Notes on the Washo. *University of California Publication in American Archaeology and Ethnology*, Vol. 36, No. 5, pp. 301-52.

Merriam, A. P., and Warren L. d'Azevedo
1957 Washo Peyote Songs. *American Anthropologist*, Vol. 59, No. 4, pp. 615-41.

Payen, L. Arthur
1959 Petroglyphs of Sacramento and Adjoining Counties, California. *University of California Archaeological Survey Reports*, No. 48.

Schellbach, Louis
1927 A Bone Implement of the Washo, *Museum of the American Indian, Heye Foundation Indian Notes*, Vol. 4, pp. 401-403.

Steward, Julian
1929 Petroglyphs of California and Adjoining States. *University of California Publication in American Archaeology and Ethnology*, Vol. 24, No. 2.

Stewart, Omer C.
1941 Culture Element Distributions: XIV, Northern Paiute. *University of California Anthropological Records*, Vol. 4, No. 3, pp. 361-446.

SOME ASPECTS OF WASHO LIFE CYCLE

by John A. Price

121 The intent of this paper is to present a descriptive report of practices concerning birth, puberty, marriage, and death among the Washo as they have been reconstructed through elder Washo informants after more than a century of contact with whites.

127 The author is indebted to Grace Dangberg of Minden, Nevada, for the extensive use of her unpublished field notes. Miss Dangberg worked among the Washo between 1917 and 1920, sponsored in part by a University of [128] California research grant. Miss Dangberg was the major contributor to the section on childbirth, although the author is responsible for the analysis and 114 interpretations throughout the paper.[1] The author worked among the Washo 122 in the summer of 1961, supported by a National Science Foundation Graduate Fellowship.

Childbirth

843 513 A pregnant woman (dawšášiʔ) must avoid sleeping flat on her back 845 for this will, according to some, cause her to have twins or problems in delivery. She must be careful to turn from side to side frequently.

841 A pregnant or menstruating woman should never touch or cast her 843 shadow on bows and arrows or rabbit nets. This is one reason why bows 784 and arrows were hung up out of the way. It was a practice for these women (224) to stay away from hunters.

Except for these proscriptions the pregnant woman continued her 843 normal daily activities and worked until a few hours before delivery. With a multitude of tasks the Washo woman was always busy, but when the child [162] arrived she stopped all normal work for a period of weeks. The attention of her small community of from 15 to 50 people, in about two to seven dwell- [621] ings, was then focused upon her, her husband, and the child.

844 When a woman was about to be delivered she left camp and retired to a place nearby where a temporary shelter and bed had been prepared for her by her mother or an old woman who acted as a midwife (demedugšiyiʔ). The bed was made in a shallow trench about as long as the woman. The ground was heated by raking hot earth into it. This layer of earth was covered with

[1] [footnote appears on p. 114 -- Analyst]

a cold layer to prevent her being burned. Grass, bark, or cedar boughs were then used to make the bed. The most common bed was a pad of braided sagebrush bark. The used grass, bark, or cedar boughs were buried and the ground was reheated each time the bed was changed. 844 [824]

There was considerable variation in these practices. For example, Clara Frank had 13 children. Her mother was the midwife for the first two. For the third baby Clara hired a midwife, who did not tie the cord properly and the baby died. Clara did not use a midwife for her next 10 children and did everything herself, including the making of her own warm bed of sand for delivery. Clara Frank and Hank Pete claimed that a separate house was never prepared, the delivery taking place within the regular house. [184]

Bertha Holbrook said that the use of this type of warm bed delays menstruation until six or seven months after the delivery, whereas menstruation after a hospital delivery takes place within a month or two. [841]

The woman lay flat on her back during delivery. The midwife tied a buckskin belt around the mother above the child and then worked the belt down by pressure in rhythm with the birth movements. One woman said that the woman was shaken to aid the delivery. Should the infant be in a difficult position for delivery, the midwife attempted to manipulate it into a better position. [845]

Hank Pete said "Sometimes the little baby is twisted around. They have the mother sit up and they feel for the position of the baby's head and legs. Then they have the mother lay on one side while they press at the baby's legs and push them into position and the mother is rolled to her other side. This is done again until they are satisfied. The first baby a woman has takes longer. Maybe a couple of hours to deliver." 844

Just before the infant was born a prayer for the health, life, and quick delivery of the child was given. The following is an example from Dangberg (1919, 30) with a translation by Roy James and orthography by William H. Jacobsen, Jr. 844 782 539

gólaš gepímiʔ milíˑgihi.	"Hurry up. Crawl out. I'll see you soon.
gólaš gepímiʔ milíˑgihi.	Hurry up. Crawl out. I'll see you soon.
meléʔmi, milíˑgimeléʔmi.	Hurry out so I can see you.
šémuyi hahi.	For sure that's the way.
gólaš háhi milíˑgiʔíŋawhi.	Hurry up. That's the way. I'm going to see you."

844 [272] [263] After the child was born, great care was taken to prevent the mother from getting cold. She was given a drink of warm water with "sugar" (dígimba) from the sugar pine. She was then submitted to further pressure by the midwife in order to insure the complete removal of the afterbirth. Some say that she sat up with knees under her chin the first night after the infant was born to effect the final draining.

846 [262] [515] The woman could not eat anything except pinenut soup and was not washed until the umbilical cord (?i?ip) fell from the child, about four days later. The woman remained in bed about nine or 10 days and had an older woman as an attendant during this period. There were often several women in attendance, but the person designated as midwife handled the baby and tied the cord.

[834] For a month (for a young mother, two months) after the child was born the mother abstained from eating meat, fat, or salt. "A woman who had given birth to four children no longer observed this taboo (Jack)" (Lowie, 1939, 303). The parents abstained from sexual intercourse for up to six to 12 months after a birth. At the end of her confinement the mother bathed, painted herself, and gave away her old clothes.

844 [412] [752] [824] The umbilical cord was cut off about 4 in. from the child's abdomen with a stone knife or a sharp cane blade. It was then tied with a string or sinew an inch from the abdomen. After this the baby was washed and the cord bound to the abdomen with a strip of deerskin. Two medicinal roots were applied to the cord. A greasy salve (dó·ša?)[2] was put on next to the abdomen and cottonwood tree bark (tšša? ?i·š) was placed on top of the cord before it was bound down. The cord and medicines were kept moist with water.

854 [853] [757] [824] Some say that the baby was not nursed by the mother for two days, but others seem to think there was no delay or that it was given warm water to suck from the end of a rabbit's foot. A baby powder was made from the ashes of the bark of the cottonwood tree. The baby was wrapped in woodchuck or rabbit skins. A grass or bark pad was put under the infant and changed when necessary.

844 [842] [754] After the child had been washed the afterbirth was disposed of. The piece of cord that had been cut off was coiled clockwise, placed back in the amniotic sack on top of the placenta, and the whole carefully wrapped in grass or bark and buried in warm ashes with the cord up. This was done in order that the mother would have more children. Should she not want any more children, the placenta was turned over and buried so the cord was on the bottom and was thus counter-clockwise. The midwife took care that no one watched where she buried the placenta for, if it were destroyed, illness would come to the mother.

[2] From Indian Balsam Leptotaenia dissecta Nutt., according to Juanita Schubert and Personal Communication.

would come to the mother. Or if it were turned over, her wish, either for more children or for none, would be thwarted. The place where the placenta was buried was remembered so it might be turned at any time the woman may change her mind. 844 [842]

As the placenta was associated with the life of the mother, so the piece of the umbilical cord that fell from the child was associated with the life of the child. This piece of the cord was carefully preserved until a convenient opportunity arose for disposing of it according to custom. The cord of a girl,[3] was finally placed in a hole bored in the root of a living sunflower (su·gil). Care was taken that the cord was straight so the child would not have a crooked back. The cord of a boy was placed in the cavity of a short length of the femur of a deer and hung perpendicular from a tree. Stewart's (1941) informants said that the cord was placed on the infant's cradle, and Clara Frank agrees with this. 846 [824] [826]

While the mother was being delivered of her child, the father had to stay away. He could not sit in the doorway of the house, or the baby would not be born easily. As soon as the father heard of the child's birth he took a bath in a nearby stream. Stewart (1941) reported that the bath was given to him by another man, that he ran before the bath, and that the father was forbidden meat, fat and salt during the wife's confinement. Lowie (1939, 305) wrote that "The husband shared his wife's fast only for the first two or three days after the birth, being subsequently free to eat anything." Gambling was also forbidden the father during this period. [844] [525]

A present of a buckskin or other clothes was given by the father to another man after the birth of his child. At the end of the observances he gave away his old clothes, bathed, painted himself red, went hunting, and gave away his first kill. Throughout the confinement the father supplied the wood for the fire. [431]

In recent times, both baby and mother were bathed the first morning after the baby's birth. The mother cut a small tuft of her own and her baby's hair and gave a small present of dress goods, a handkerchief, or money to any of the women present. This helped to bring good luck. The month of meat taboo is still observed by the more conservative Washo. 844 178 [431] [777] 846

The mother used to stay in bed for a long time. She was massaged with a salve (do·ša?) and had red ocher (sawšaŋ) applied to her body. She was instructed not to get up too quickly, and she would exercise a little each day. She would have her hair trimmed on the day of the baby feast (išwgaŋ ?ēmluhaya?).[4] [759] [302]

[3] Wyethia mollis Gray, according to Juanita Schubert, personal communication

[4] Literally "she (or they) feed the baby," acc. to William H. Jacobsen, Jr., pers. communication.

846
527 A feast terminated the period (one or two months) during which the
[431] mother was not permitted to eat meat. Gifts were given away and it was par-
ticularly important for the grandparents to be present, the food being passed
[605] to them first. The mother at this feast ate meat again and a little ritual was
[852] performed for the baby.

854 The baby was often rubbed with soft sagebrush, which after use was
thrown eastward. If it was a girl her forehead and cheeks were painted with
302 red ocher. If it was a boy his nose and chin were painted with a white pig-
ment (dibek).

352 The first cradle was used on the day of birth and a new cradle was
854 used after each bath during the mother's confinement. These temporary
cradles are quite different from the permanent cradles in having an oval back,
woven sides at the head end, and no hood in front or crossbars on the back.[5]
The temporary cradles are not used today and are rarely seen.

The baby was placed in its first permanent basketry cradle at the end
of the mother's confinement, and new larger cradles were used as the child
[757] grew. Up to five cradles may have been used before the child began to walk.
The hood or sunshade (mafyó·dop) of the cradle had pendants of shell or beads
suspended from the front "to prevent the child from becoming cross-eyed."
[531] Hank Pete said that the baby's umbilical cord was tied to the front of the hood
for this purpose. The hood still carries a design of parallel diagonal lines
for a boy and a continuous zigzag or diamond chain design for a girl.

854 A sagebrush bark pad was placed in the cradle and the infant, wrapped
in a small rabbitskin robe, was placed over this and lashed to the cradle with
buckskin. A buckskin strap was attached to the back of the cradle and passed
over the forehead of the woman who carried it.

843 If a miscarriage occurred the fetus was disposed of in the same man-
ner as the placenta and umbilical cord and the same beliefs attended this act.
One woman was careless enough to allow her mother-in-law, who was angry
[754] with her, to see the disposal of the fetus. It was believed that the mother-in-
law had either destroyed it or turned it over and buried it in another place,
because this woman never had another child and was in poor health after the
miscarriage.

845 A stillborn baby was buried in warmed ground and the baby basket
847 was placed in the crotch of a tree, or merely thrown away. Abortion was ef-
fected by applying pressure to the abdomen. The men are said to have ob-
jected to this.

[5] Susie Dick made one of these cradles for Grace Dangberg.

There is considerable variation with respect to beliefs about twins. 845
Lowie (1939, 305) wrote that "People liked twins and sometimes laughed at
one of them, saying 'That man does more work than others' (because he is
double)." Susie Dick reported that Sadie had twins and one was buried alive. [847]
Masta said that one of a pair of twins always died, and that when she buried
one of her twins the other one had died in sympathy. Another informant said [777]
that one of a pair of twins died at birth in Waco Valley, and that it was generally bad luck to have twins.

If the mother would not tell who the father of a newborn child was, 847
the child may have been allowed to die. A few informants deny this, but some
say that if the mother desired to keep the child she was always free to do so.

Lowie (1939, 305) wrote that "A barren woman sometimes adopted her 577
cousin's child and kept it for good. If a woman died in childbirth, her mother 605
took care of the infant.".
736

Certain positions of sexual intercourse were considered better for 842
producing boys and certain for girls. Also a game of string figures like
"cat's cradle" was played by women to determine the sex of an offspring. [833]
[524]

Girl's Puberty

When a young girl between 12 and 14 years of age first began to menstruate (gumisasum) she told her mother. This started a several week period of ritual observances that would officially see her through the change from a girl to a marriageable woman. This ritual prepared her for her life as a woman, generally, and for proper behavior during menstruation in particular. 881

Any menstruation involved certain proscriptions, just as did all ex- 841
cretion. One should bury body wastes of all kinds. One should not spit in 881
the fire or burn finger nails. When the hair is cut off it should be thrown in 574
a stream, or buried with a wrapping of sagebrush bark deep in the mud. But 302
burning was prohibited. It would be a terrible thing to burn a baby's feces,
for example.

Whenever menstruation occurs the woman is forbidden salt, meat, 841
fish, or fat of any kind. The flow lasts longer for those who eat meat. She 881
should not scratch herself. When her menstruation is over she should wash
in cold water, but to drink or bathe in cold water during menstruation would
cause sickness. Eating ice cream today by menstruating women is sometimes [753]
explained as the cause of sicknesses.

881

Prior to the girl's first menstruation she is instructed on her proper behavior. She is taken to many ceremonies for other girls and she knows what she has to do. The rules and ritual observances are as follows:

[785] [272] [263] 1. She must fast for four days. She may drink only warm water with "sugar" from the sugar pine in it. Some say this sugar has a mild laxative effect. The actual period of extreme fasting is around three and one-half days.

[262] 2. She must fast from all meat, fish, fats and salt until four days after her next menstrual period starts. The meat taboo is reported to have gone on for two or even three months.

3. She must run daily for the next four days and she must work for others by carrying firewood or helping her mother.

4. She must sleep only briefly each night, get up early in the morning, and never lie down during the day.

5. During the four days of fast she must remain standing so that the blood will run down. She will have a staff for this purpose.

[778] [761] 6. If she lets the staff fall she will die soon. If the staff breaks she will break her leg or her back.

[752] [783] 7. She is unclean and must therefore avoid hunters, fishers, men going to gather rabbits, and all of their equipment. She must also avoid gamblers and the sick.

[302] 8. She must not comb her own hair or scratch herself with her fingers for a month. If she does, her hair will soon turn grey.

9. At the end of the four days there will be a ceremony in which she will dance, be painted with red ocher, be bathed, have a ritual repast, and then a feast for breaking fast.

881 574 [178] 10. There will be four feasts in her honor -- the first on the fourth day after the beginning of her menstruation. The second feast is about 15 days later. The third is on the fourth day after the beginning of her second menstruation. The fourth feast is about 15 days later. Today, with the addition of breakfasts after the dancing connected with the first and third feasts, there are six feasts.

[302] 11. She will have her hair trimmed at the second and fourth feasts (third and sixth today).

881

For the first two days only the immediate family and relatives were 602
concerned. It was up to them to provide the food for the feast and gifts for 577
guests. A close relative could eat at the feasts, but would never take one of [431]
the gifts. The close relatives played the leading roles in the ceremony.

The girl's mother, older sister, or some other woman would comb [573]
her hair, assist the girl to stand up, and keep her from making mistakes.
This assistant (deeŝi?) was not necessarily the same woman for the whole four [302]
days.

Her father or uncle "talked" for her health, announced the customs of the ceremony, and told about all the fine food that had been brought for the feast. Her mother, grandmother, and some other old and respected woman bathed and prayed for her during the ceremony.

The staff ([illegible] [illegible]) that the girl carried was made from a strong 881
straight piece of elderberry wood about 7 ft. long. The bark was peeled off 778
and the staff was painted with red ocher in bands or all over. The staff was [824]
prepared by the girl's assistant on the first day of her menstruation. When the staff was completed the assistant would speak to it saying "My stick don't fall down. Help this girl." It was important that the staff never fall to the ground for it was symbolic of the girl -- straight, erect and strong.

During the woman's dance (ʔuwi·ya) a present of buckskin, feathers, [431]
or moccasins was tied to the staff. This present was taken off by one of the woman dancers. The staff also served as a scratching stick.

On the morning after the dance and the girl's bath, the staff was taken by the girl's father and hidden somewhere on a mountain side. The father placed or tied the staff upright next to a young living tree. It was preferably placed on the north side of a tree where the sun would not strike it and bend it. Some say that a brother or sister may take the staff to the mountain side and that the staff may be leaned against a rock, placed in a hole dug in the ground, or placed in a natural crevice in the rocks. After it had been hidden it was left untouched. It was believed to aid the girl through her life, giving her legs the strength and lightness to climb the mountains.

One of the girl's tasks was to gather wood for the fires of her ceremony. 881
Her assistant, brothers, sisters, or friends were permitted to help her. Some 313
of this wood was placed ready for a fire where the dance would be. The rest was placed in four piles up the side of a nearby hill to the top.

881 On the evening of the third day of fasting the girl ran up the hill with
a firebrand and lit the four piles of firewood. Some say that her brother,
[202] sister, or other relative did it if the girl was too weak. The fires were a sym-
bol to all who saw them that a girl's dance was to be held and everyone was in-
[578] vited. If the girl became ill, if there was a death in the girl's family, or if
the family was too poor for a feast, there would be no fires and no dance.
But the girl would still fast and go through the essential washing ceremony.

881 By nightfall of the third day a fire was built near a level dancing area.
535 The ceremony started with the chanting and swaying of about six to 12 women
in a tight group of three or four rows. These women stood about 10 ft. from
[778] the fire and faced the fire eastward. Between these women and the fire were
placed the girl's staff and another similar but unpainted staff. The ends of
these staffs were buried partly in the ground about 6 ft. apart. The girl and
her assistant stood between the staffs and faced the group of women, each
with her outer hand on a staff and with their inner arms interlocked.

881 The women's chants were both learned and improvised. The texts had
533 no meaning. The chanting was led by one woman while the others picked up
535 the syllables and melodic line. At a ceremony observed on July 19, 1961,
the melodic line varied, but the rhythm stayed about the same with a meter of
about 90 beats a minute. The swaying of the women was at half of the meter
of the singing. These are four of the several chants used: *ʔíweʔyáʔaiʔi,*
ʔimliʔhóˑʔiya, *nélománe*, and *héyeye*.

881 The girl (age 13) and her assistant (an old woman and, later, a woman
535 of 25) danced about 20 "sets" with short pauses between. A "set" consisted of six or seven short jumps to the left and six or seven jumps back to the right repeated from three to five times. The women started a new chant with each set. A set took about 30 seconds and the rest interval was about 15 seconds. The girls danced about 14 minutes. The dance by the girls in front of the swaying and chanting women is called the *meleheʔ* -- "to jump up and down in one place repeatedly" (Jacobsen, personal communication). It is believed to make the menstrual blood flow. If the menstruator is too sick or too weak to dance, her role in the dance may be taken over by another woman.

As soon as the woman's dance ended, the general dance for everyone
(*daʔwéʔweʔ*, "to crawl enclosing repeatedly") began on a large dance ground
to one side of the fire. This was started by some older people who interlocked
[178] fingers and formed a circle while facing toward the center of the circle. The
men and women danced separately, each forming an arc of the same circle.
[562] Today the separation of the sexes is only partially in effect and couples often
dance side by side.

An older man led the chants and the dancing. The dance proceeded 881
in a clockwise motion with the dancers moving to their left around the circle. 535
The dance leader started a chant, others joined in, then the dancers stepped 533
off with their left feet and dragged their right feet up to their left. When
everybody got in rhythm, the step changed to a short sliding jump or hop with
both feet moving a few inches to the left each jump. This step was similar
to that of the two girls dancing before the chanting women.

Over a period of one hour the meter of this dance varied between about 60 and 120 beats a minute, slowly becoming faster as the set progressed, until it ended in a rest. A chant lasted from three to five seconds and was repeated every one and one-half minutes. The rest interval between the periods of chanting ranged from 20 to 45 seconds with an average of about 30 seconds. There was surprisingly little variation in the length of the rest or the length of the chanting. The chant leader initiated the chant and the step, and it took from five to ten seconds for the dance circle to pick up the step. Several dancers did not chant, and the chant leader changed several times during the night, although one man led for over half the time and was considered the best leader.

Today nickels, dimes and quarters are given away by the girl, who is 881
held up by her attendant in the center of the dancing circle. The two hop back 535
and forth toward the moving circle. The girl holds the money between her 431
thumb and forefinger and extends her hand. The dancers that are close at- 178
tempt to snatch the money out of her fingers, but as a joke she may pull the
money down out of the person's grasp with her thumb. As she jumps she
gives a high bilabial chirp. This role is often taken over by two older female
relatives, since the girl is too weak to do much dancing. In the past, shell,
beads, or feathers were used for this purpose.

Another custom that occurred was for the buckskin skirt, poncho, 881
moccasins, or any and all of the girl's clothes to be taken off and kept as gifts 431
by the women guests. She was not allowed to wear them after the washing
ceremony anyway and she would receive a new outfit of clothes. Today she [178]
may tie a handkerchief or scarf on her dress for someone to take off. Also
today she may wear an extra dress or two over her regular clothes, which
are taken off as gifts by the older women.

Today as well as in the past the circle dance (łe?wé?we?) continued un- 881
til the morning washing ceremony, except for a period during the feast around 574
midnight. The feast of pinenut soup, acorn biscuits, and cooked seed mush, [535]
roots, fish and game was placed in the baskets of the guests by the relatives. [262]
The lavishness of the feast depended largely on the time of year or whether
some relative had been able to shoot a deer. In the fall there was plenty to

881
[574] eat and the variety was greater. In late winter perhaps pinenut soup was all
[262] that would be available.

[535] The dancing lasted until just before sunrise. Then, before the sun actually showed over the horizon, the washing ceremony (gumyiši, "washing one another") began. During the ceremony the girl continued to face the rising sun. The girl was naked, except perhaps for her short buckskin apron.

881 The woman who conducted the ceremony marked the girl with red ocher
302 on the face, arms, body and legs. As she painted she gave a short prayer appropriate
782 to each part of the body. When she marked the head she would say "Do not have headaches"; for the arms she said "Have strength"; for the body "Have no cramps"; and for the legs "Be light on your feet and walk long."
[183] To be "light on your feet" and to be able to walk far until one was very old was the finest attribute a woman could have.

881 After the painting and prayers, the woman who conducted the ceremony
[515] used a fine watertight basket to pour cold water over the whole body of the girl.
[415] As soon as the water had been poured out, the basket was handed to the girl, who threw it out over the heads of the viewers standing to the east of
[431] her. The basket was kept as a gift by the person who caught it.

[302] Some say that instead of red paint one could use some sagebrush dipped in ashes to mark the girl. Jane Atwater (1954) wrote that the basket was circled four times above the head of the girl. Lillian Eichler (see Lowie, 1939,
[824] 307) stated that "The ceremony closes at sunrise, when the girl is taken inside her tepee and attired in bunches of sagebrush, in which money is con-
[431] cealed. She appears later before the assembled dancers outside and throws the money to them amid a wild scramble. A can of water is then dashed over her head, concluding the ceremony, after which she is ready to receive a proposal of marriage."

177
178 In aboriginal times after the washing ceremony was over the remain-
821 ing people would gamble or play other games. In the 1920's or earlier, gam-
525 bling and games were replaced by a purely social dance (ašiši, "to drag the
524 feet repeatedly") that the Washo claim to be the Northern Paiute "round dance."
535

All of the prepared food left over from the feast was passed out to the
881 guests to take home with them. During the games and final food distribution
574 the girl was given a ritual and then a real breakfast. Then about 15 to 20 days later a small feast was held for the girl and her close relatives. At the next
[431] onset of the girl's menstruation all of the elements mentioned so far for the puberty ceremony were repeated: the fasting, four fires, the dances (ʔuwí·ya, melehéhe? and ešwé?we?), the feasting, the washing ceremony, the gift

giving, and the ritual and real breakfasts for the girl. This was again fol- 881
lowed by a small feast for the close relatives about 15 days later. At the 574
final feast the girl ate meat again and was eligible to marry. All informants [262]
agree that she was never actually married for some time after -- usually [582]
more than one year.

The girl's puberty ceremony today is clearly the most important so- 178
cial event among the Washo. However, many aspects of this custom have 881
changed and many new elements have entered. The four fires are not made
today "because of the fire hazard." In the summer the dance ground is
usually sprayed with water to keep the dust down. Baskets are only rarely
made and given out, and any steel bucket or pan is used to pour the water on
the girl. The girl wears a slip when she is washed and the red paint is no
longer applied to her, although the woman conducting the ceremony goes
through the prayer sequence, brushing the girl with a cloth or sagebrush.

Except for the brief rituals involving the girl, the puberty ceremony 178
today is much like a big family reunion and dance anywhere in modern rural 574
America. Many people help to bring the food. They arrive in cars and trucks 881
and are dressed in western American clothes. The dress of the older women
is somewhat unique with their particular style of long full skirt, large shawl,
and silk scarf worn over the head. This style of dress was apparently adopted [177]
from the local ranch women of the late 1800's and has changed little since.

Everyone speaks English most of the time. There is a lot of joking [191]
and talk among friends. A few young men may bring some wine or beer and
pass it around to their friends. One or two may become intoxicated as the [273]
evening wears on, and, by dawn, "when they can see who they are hitting," [578]
may begin fighting. Most of the people disapprove of heavy drinking and
fighting. For the most part the whole affair is run the way the middle-aged
and old women want it to go.

A girl's puberty ceremony was held at the Dresslerville community Hall the evening and morning of July 19 and 20, 1961. A large stack of wood had been placed north of the Community Hall, a fire was built north of the woodpile, chairs were placed around the fire, and a dance ground about 60 ft. in dia. was wetted down with a hose north of the fire and chairs. The 27 cars and trucks present were parked along the road and part of the way around the dance ground.

People started coming to the hall at 8:30 p.m. to bring food and talk with their friends. The woman's dance began at 9:45. The poles used by the two girls, who danced in front of the swaying women, were just held in the hands of the girl and her assistant and were not placed in the ground. Several

178 Several
574 women started the circle dance (ʔeʔwéʔweʔ) at 10:20 and soon several men
881 joined in. One man took over the lead in singing. The leader was changed
[535] five times during the dance. Dinner was served to about 135 people inside
the Community Hall from 12:50 to 2:15 a.m. With the exception of acorn
[177] biscuits, all the food was typically American, with beef stew, beans, bread
[262] and butter, salad, cake or pie, and punch or coffee, served in paper plates
and cups and eaten with wooden picnic forks.

178 The girl -- in a white slip and barefoot -- was washed at 5:00 a.m.
881 A cloth was brushed over her with the prayer and then a gallon bucket of
[481] water was poured over her. She threw bunches of sagebrush twigs tied with
a thin piece of cloth, in which coins had been wrapped, to the crowd to the
east of her. She also threw several small rolls of cotton dress goods. She
then went inside to dry off and put on a dress.

Inside the hall the girl finished her ceremony at 6:00 a.m. by putting small bits of cake, bread, vegetable salad, acorn biscuit, and sagebrush leaves in her mouth, chewing and expectorating them. After that she ate a full breakfast, except that meat was still taboo. The author's informants claim they have always practiced the ritual breakfast. The literature makes no mention of it, however.

[574] The dancers had decreased steadily from 42 at 10:30 p.m. to eight by
[535] 5:30 a.m. There had been an hour break in the dancing between 1:20 and
2:20 a.m. in connection with the feasting. For the few that stayed, a breakfast was held and the food that remained from the feast was given away between 6:00 and 7:00 a.m.

The girl's next puberty ceremony was held on September 3 and 4, 1961, 46 days after the first. The author suspects that the Labor Day weekend had more to do with the scheduling of this second dance and feast than the girl's menstrual period.

Boy's First Deer

881
224 The observance of a boy's first kill of a deer has never been impor-
[178] tant as a social ritual among the Washo. Most of the literature does not mention it, nor has it been practiced for over 20 years. But, like the other crises rites, the boy's first male-deer ceremony was important economically.

Prior to this ceremony any fish or game that the boy killed was given 881 to others outside his family. When he passed this ceremony he could then 224 eat his own kill and share it with his family; he was then considered a man and could have a wife and family of his own.

The ceremony was initiated by his shooting a large male deer or antelope. After the animal had been skinned, the tips of the horns were placed on the ground, leaving a space between the ground and the arc of the horns. The boy then attempted to crawl under the horns moving toward the eyes and nose of the deer. If the horns of the animal he shot were large enough for him to crawl under, he would have good luck as a hunter. If he knocked the horns [777] over his luck would be bad. He would then have trouble in following the track of the deer.

Following this act he was given a bath and a prayer for good hunting [515] and health by either his father or mother. The animal that the boy had killed [782] was not eaten by the boy or his family, but was given away. My informants said that not all boys went through this ceremony, and that in some instances it was the father that actually shot the buck.

Marriage

Almost all marriages among young people were arranged by the parents. 584 The young adults of 14 or 15 were shy toward those of the same age and opposite sex so they were rather pushed into a courtship that would last for about a year. This courtship could be initiated in several ways.

After the parents had looked the prospects over, they might take a gift to the parents of the young person they had chosen as a spouse for their child. The gift was usually food. There would be polite conversation, usually about matters unrelated to the young people concerned. Then if the gift was accepted, by the recipient parents' taking it in their hands and using it or placing it with their other things within the house, a form of engagement was established between the children. This would be followed by a reciprocal gift, usually at the same visit. If the gift was left untouched, it would be taken back by the would-be givers and there was no engagement.

The fall festival (gumsabáy?) just prior to pinenut picking was a time [527] when many engagements and marriages were contracted. For young people, the engagement usually lasted a year and was often contracted at one festival and the marriage finalized at the festival of the next year. During the year of engagement the courtship was watched carefully by the parents so that it

584 did not become too intimate. Hank Pete said "If this man maybe wants to give a gift to his girl friend, he doesn't look at her. She is in there where she can't see him. He visits, but they don't let them talk while they are exchanging gifts. She sits just inside to the right."

Bertha Holbrook said "My husband asked my mother's brother and he said it was a good thing. He used to give my folks money. They were poor. I never spoke to Mike before I married him." Clara Frank said the engagement was very strict and that no one but the parents said anything.

585 Marriage occurred when the parents agreed to let their children actually reside together. Bertha Holbrook mentioned the custom of having the two dance side by side and putting a single rabbitskin robe over the shoulders of both of them.

591 The newly married couple never moved out and established a residence apart from their relatives. They moved into the house of either parent. It was more common for them to move in with the wife's parents, but they often moved later to the husband's parents' place. The marriage sometimes resulted in both sets of parents' living in the same or adjacent houses. In rare cases, if both of the parents' houses were unsuitable to the couple, they would move in with another relative. When the couple had a few children of their own they might then set up a household separate from their parents.

58 Engagement, courtship, and other formalities were reduced for mar-
riages that took place later in life. Divorce occurred when economic coopera-
586 tion, common residence, and exclusive sexual rights no longer prevailed. If
children were involved in a divorce they were divided according to the ability
[593] of each parent to support them or they were raised by other relatives. Usu-
ally there was a strong emotional attachment between a man and wife, in addi-
tion to factors of economic and sexual dependence, so that divorce is said to
have been rare.

595 If a wife had younger sisters they frequently became her husband's wives as well, although the practice was not mandatory. It was the most common form of polygyny, but some men had two or more wives who were not sisters. Hank Pete claims that his grandfather had from three to five wives at various times during his life.

The author knows of only two cases of polyandry and both of these involve a woman's marrying two brothers. Hank Pete said "A woman married two brothers about 65 or 70 years ago. They got along fine. She rustled food for both of them. She had one girl and two boys by one man and no children by the other. They didn't live together. They had two gális dáŋal ('winter houses') along the East Carson River." Roy James said that his mother's mother from Markleeville was married to two brothers at the same time. 595

Lowie (1939, 308-10) made several important observations concerning Washo marriage: "The giving of present to the bride's parents is called kumyu'ga, the return gift umlagu' 'wa'a. This exchange continued for several months. Sometimes a youth and a girl met at a dance and came to live together without parental arrangements. . . . Bill said a wife used to obey her husband. . . . The kinship terminology classes all cousins as siblings, and marriages of cousins were not considered proper. . . . The sororate was practiced, at least to some degree. . . . A widow would wait six months, a year, or even two years before remarrying, and then sometimes married her husband's brother. . . . Though correct, sororate and levirate were not compulsory; Bill explicity said that the bereaved person might marry anyone else. . . . There was no mother-in-law taboo." 58 [593] [601] [606]

Most of the Washo marriages that take place today are performed according to modern American customs. There has been considerable pressure from the white community along this line so that land settlement, welfare, and social security payments can be stabilized. The first Washo to apply to the clerk of Douglas County, Nevada, for a marriage license did so in 1919. 177 585

Death

Death (deyúllyiʔ) occurred by "disease," accident, starvation, witchcraft, old age, murder, abandonment and suicide, in roughly that order of importance. "Disease" occurred when the body was entered by a foreign spirit or object. If the object had been placed there by a person it was witchcraft and, when discovered, witches were murdered. Old or blind people who could no longer keep up the strenuous treks or who were no longer economically useful became resigned to die and accepted their fate. They would say "This will be my last trip to the pinenuts and then I will stay there and die" or "I will go for acorns and not return." 761 753 732 888

Grace Dangberg (1919, 6) collected the following story from an old white resident of Genoa, D. R. Hawkins. "I found an old blind Indian left in the cold to die. He was left with a cup of water and some pinenuts tied to the pole of a rickety tent so he could find his way back to it. I discovered him and persuaded an Indian to take care of him for pay. He was deserted by this Indian. He was found again by whites who got another Indian to take care of him. Finally the Indians took him to a cliff, shoved him over, and stoned him to death."

762 [824] Suicide was sometimes accomplished by eating Western Water Hemlock (díme? dé·guš).[6] Hank Pete related a modern double suicide. "Up at Coleville at a rodeo a young lady killed herself with a pistol in the head when she was refused money by her grandmother. The mother of the girl killed herself when she heard about her daughter. They saw her going down to the river. They thought she was going to jump in. Instead, she ate some wild parsnip that grows there. It took her about an hour and a half to die. That's the only time I've heard of Indian suicide. There have been a lot of killings."

764 There was a great amount of variation in disposing of the dead. They could be left where they fell if they died away from camp, buried, cremated, put up in a tree, in a hollow log, or left in the house where they died. The most common means seems to have been burial with the body extended. A trench big enough for the body and about 2 to 3 ft. deep was dug with digging sticks. Baskets were used to place the dirt to one side. The body was prepared by male relatives, but any person could do the job. The body was laid flat on its back. Some of the property of the deceased and gifts of food were laid in with him. The whole was covered over with dirt and a pile of stones. The deceased was dressed in his own clothes and wrapped in his own blanket. Harry Hawkins, an elderly white resident from Woodfords, California, said he often saw the Washo wrap the deceased in a bearskin robe for burial. The remainder of the property of the deceased was broken up and thrown away, or burned. Those who participated in the burial would wash themselves afterw[illegible].

768 The house of the deceased was usually torn down and left to rot. It
764 was occasionally burned, sometimes with the deceased and his property inside. The latter practice was more common during the winter when the hard ground and snow prohibited burial.

764 Hank Pete (born about 1884) told of a winter burial he saw as a youth. "They burned out the stump of a tree and dragged the body there and wrapped him up in some hide and got willows to tie him up and put him in there. His legs were in the hole and his head was up. He froze there. Later they saw the magpies were after him so they threw brush and rocks on top of him."

Lowie (1939, 310) related that "All used to dance around the fire and cry. They would put sagebrush two to three feet high and place the corpse on top. The clothes of the deceased were hidden lest anyone wearing them
[765] should fall sick. . . . According to Bill, the Washo sometimes -- but not very often -- burned the corpse, putting it on a pile of brush. In the latter event the bones were subsequently interred."

[6] Literally "water sweet potatoes", *Cirsuta douglasii*. (Juanita Schubert, personal communication)

Mourning took place around the grave. Both male and female relatives cut their hair short and buried the hair clippings. Ashes were smeared on the mourners' heads. All mourners would abstain from washing until the mourning was over and then would take a bath. The people cried, wailed, and spoke to the deceased saying "You are dead now. I'll never see you again. My wife [or other appropriate term of address], I don't want to see you any more. We can't talk like we used to. Don't make any noise outside our house. You live under the ground. We don't want to see you any more." 765 [515]

It is reported that if you did not appear sorry the spirit would come and take you or another relative away with him. The mourning ceremony might last up to four days. After that most of the people attending would wash and be finished. But the wife or husband of the deceased is reported to have remained in mourning for a considerably longer time, perhaps a year or more. There was a permanent taboo against speaking the name of the deceased in front of the deceased's close relatives. [775] [551]

Hank Pete said that one way to get a deceased person out of your mind and to stop hearing his voice was to hang a pendant of manzanita berries from the lobe of the ear. The berries were tied with sinew through a hole made in the lobe. 765 824 789

Susie Dick told Dangberg (1919, 5-6) of the following funeral. 764

> "Susie's niece died Thursday, August 7th. On Friday Susie went to the funeral. . . . This dead woman's grandfather was a doctor. He kept trying to give her a dream, but she would not believe it and died as a result. [787] [761]
>
> "Her funeral will be conducted in this way. The people will all gather about the corpse. The relatives will wail. Those of the spectators who do not join in this will be forced to do so by the relatives.
>
> "A doctor will address them and when they grow tired standing he will permit them to sit down. Everyone present will go touch the corpse and repeat in so doing a short exhortation to the spirit: 'Go away,' 'Do not bother us,' etc. At this time each person will lay a handkerchief, a piece of money, etc., upon the corpse an an offering to the spirit to make it content to stay away. Finally the people will take the corpse to the burial ground and bury it. Susie said, 'There is such a ground near Woodfords. One can hear the dead Indians singing and speaking there.' 764 775 [782]

Notes

115

1. Grace Dangberg's informants were Agnes Pete, Susie Dick, Manta, and Dave Cheney. The author's principal informants were Bertha Holbrook, Clara Frank, and Hank Pete of Dresslerville, Nevada, and Roy James from Woodfords, California.

2. From Indian Balsam, Leptotaenia dissecta Nutt., according to Juanita Schubert, personal communication.

3. Wyethia mollis Gray, according to Juanita Schubert, personal communication.

4. Literally "she (or they) feed the baby," according to William H. Jacobsen, Jr., personal communication.

5. Susie Dick made one of these cradles for Grace Dangberg.

6. Literally "water sweet potatoes," Cicuta douglasii. (Juanita Schubert, personal communication.)

Bibliography

113

Atwater, Jane
1954 Washo Indians. Nevada State Journal, January 31, 1954.

Dangberg, Grace
1919 Washo Field Notes. MS, Minden, Nevada.

Lowie, Robert H.
1939 Ethnographic Notes on the Washo. University of California Publications in American Archaeology and Ethnology, Vol. 36, No. 5, pp. 301-52.

Stewart, Omer C.
1941 Culture Element Distributions: XIV, Northern Paiute. University of California Anthropological Records, Vol. 4, No. 3, pp. 361-446.

DIFFERENTIAL RESPONSE TO WHITE CONTACT: PAIUTE AND WASHO[1]

by James F. Downs

N W 121 The purpose of this paper is to examine the marked difference in response to white contact displayed by two groups of American Indians, the Washo of western Nevada and eastern California and the Northern Paiute of western Nevada. The groups will be analyzed in a somewhat broader temporal framework than is common in acculturation studies, with historical and environmental factors as the primary considerations.

N W 121 182 It is fruitful to view social organization on the primitive level characteristic of the Washo and Northern Paiute as a technological adaptation, i. e., a method of obtaining subsistence. On a higher level, an advanced technology may be substituted for social organization in the subsistence struggle, and social structure might then be analyzed as an adjustment to the technology. This appears to be what has happened in Nevada. Indian social structure seems closely tied to the actual ecological relationships of man to environment; the white population, on the other hand, exhibits social structural elements that are related not to the immediate environment but to the technologic and economic system the white man has brought to the area.

N W 121 One of the reasons for the above suggestion is that in an examination of the Washo and Paiute situations the social structures of the two groups do not appear to be significantly different. Certainly the difference between Washo society and Paiute society was no greater than the differences among various Paiute groups (Steward, 1938, 230-60; Stewart, 1941, 406-7). If we can consider the social structural variations as constant, it may be possible to find significant differences between the two groups in an examination of their history and ecology.

N W 121 177 The major thesis guiding the present discussion is that the differences in response of Washo and Paiute to contact are a result of their occupation of what had been two distinct ecological areas. These two groups developed different relationships with surrounding peoples and different orientations toward subsistence activity, which were observable when the white man's entry into Nevada altered the environmental situation.

Northern Paiute NR13

The Aboriginal Situation: The Paiute

182
22 At the time of first contact the subsistence activities of the Paiute were based on an exploitation of a none-too-provident environment. The
[177] small groups of Paiute who lived together -- with the exception of those occupying the fertile Owens Valley -- appear to have been on the move almost constantly. Harvests of seed had to be made within a few days or weeks at the most, before the ripened seeds were scattered on the ground. Roots, berries, rodents, snakes, fish and insects were sought. Of primary importance were the pinenuts of the mountain areas. These provided a major source of food for survival through the winter. A general survey of foods available suggests that the area could support a larger number of people than
161 it actually did (Steward, 1938, 14-33). Population figures show a high density in the Owens Valley (2.1 sq. mi. per person) to a low at Beatty (44 sq. mi. per person). In the area immediately to the north of Washo country -- called vaguely the Humboldt River country, in which the Carson Sink, Pyramid Lake and Humboldt Lake are located -- density ranged from 2.5 sq. mi. per person at Battle Mountain to 5 sq. mi. per person at Halleck and
132 Wells (Steward, 1938, 48-9). The sporadic rainfall of the area was a lim-
161 iting factor, often failing completely and reducing plant harvests, so that
22 population appears to have been geared to the minimum rather than the max-
182 imum food supply.

224 I have included rodents, fish and insects under the gathering aspects
[226] of Paiute life. The pronghorn antelope, the jack rabbit, the mule deer and mountain sheep were the animals most frequently hunted. The first two
[222] species appear to have been hunted largely in communal drives. The mule deer was hunted occasionally by groups who drove the animals into ambush or over cliffs (Stewart, 1941, 366, 422). Dogs were used by some bands to aid in deer hunting (Stewart, 1941, 422). Deer were also hunted by individuals or small groups of stalkers, a method that appears to have been the only one used to take mountain sheep where these animals were available.

Rabbits were perhaps the most important hunted species because of their relative abundance. Antelope herds were almost totally depleted by a single drive and could not be hunted in the same area for a number of years.
[476] The antelope and rabbit were significant in terms of social organization be-
[571] cause the communal hunts were among the few occasions when any large number of Paiute assembled in the same place. This, however, was limited by the period of time the captured game could support a large group of people.

182 In general the ecological adaptation of the Paiute was one of small groups of people shifting within relatively wide areas in response to the ap-
22 pearance of various wild crops and animals. The pinenut appears to have

N
been the most important single source of food, providing sustenance through 182
the midwinter months when no other plants were available because it grew in 22
large quantity and could be stored for relatively long periods.

A loosely structured bilateral band of family groups appears to have N
been the most important unit besides the family itself. The membership within 621
a band was apparently very fluid, since families shifted bands or left the
company of other families in the pursuit of food. Communal hunts for ante- N
lope or rabbits brought several bands together under the special direction of [224]
a shaman or rabbit boss. Exceptionally good gathering conditions also con- [222]
centrated people, but there appears to have been no tendency for larger groupings of gatherers to involve more than a number of separate bands operating
in the same area. This is in part because of the nature of gathering -- as opposed to rabbit or antelope hunting -- where cooperation did not necessarily
produce more food. Except for these two situations, supraband organization
and leadership appear to have been nonexistent. Within the band, leadership N
was informal and nonauthoritarian. Tribal identity, except for a broad dif- [619]
ferentiation between Northern Paiute and other Paiute, Shoshoni, Bannock,
and Ute and the Washo, as well as the various neighboring California tribes, N
appears nonexistent at this time. All the Paiute were never assembled for [476]
any enterprise, although bands may have assisted each other in war against
some common enemy. There appears, however, to have been no real war [628]
among the various Paiute bands. Disputes were settled by arguments, fights [578]
and skirmishes in which rocks were thrown (Steward, 1938, 238).

The Aboriginal Situation: Washo W

The Washo occupied the area between Lake Tahoe and the Pine Nut 131
Mountains east of Reno. The north-south extent of their territory appears to [172]
have been from Honey Lake to Antelope Valley. There is archeological evidence as well as the testimony of informants that Washo territory once extended well into California, perhaps to the edge of the San Joaquin Valley W
(Heizer and Elsasser, 1953; Kroeber, 1925, 391). Linguistically they repre- 197
sent an isolated fragment of the Hokan stock; the Paiute are part of the great
Shoshonean stock of wide distribution in the Basin.

Unfortunately the ethnographic information on the Washo is far less W
complete than is that on the Paiute. However, there is nothing to suggest, in 171
the information on hand, that the Washo differed markedly from the Paiute in
subsistence activities, social organization or culture.

N
W To anyone familiar with the Washo territory as contrasted to the area
182 occupied by the Paiute it would seem logical to postulate differences between
these groups in terms of different environments at the time of contact. However,
if we examine the environments of these two groups in terms of what
Steward has called significant ecological factors (Steward, 1955, 30-42) it becomes
clear that the differences are in degree rather than kind.

W Hall (1946, 44) points out that the area occupied by the Washo contains
136 12 species of mammals not found elsewhere in Nevada. These include a species
182 of shrew, the marten, the mountain beaver, the snowshoe rabbit, the Douglas
squirrel and the black bear. The shrew, marten and mountain beaver were
262 of little or no importance as food animals, and the marten was considered desirable
only for its fur. The snowshoe rabbit was taken occasionally when
encountered, as was the Douglas squirrel. It should be pointed out that there
were other species of rabbit and many species of squirrel distributed throughout
W the Basin which served as food resources. The bear, despite its size,
[825] had little or no importance in the economic life of the Washo. Its religious
[771] significance was high, and bear hunts were important in attaining social status,
but its flesh was eaten only in cases of extreme hardship.

Mule deer, pronghorn antelope, mountain sheep, jack rabbit, gophers
and ground squirrels -- all important food sources -- were distributed throughout
the Washo and Paiute areas in Nevada. Waterfowl and fish were found
wherever sinks, lakes and watercourses existed. It appears that the Washo
area was distinguished from the remainder of the territory by a greater concentration
W of these various food sources. However, this concentration was
[361] not so plentiful as to permit long term sedentary village life or the permanent
organization of large political groups. Moreover, there were within the
Washo area no animals or plants whose taking required social or technological
organization different from that of the Paiute.

W An examination of the culture element lists prepared by Stewart (1941)
N shows that the Washo shared many traits with Paiute bands. In fact, the
171 Washo often shared traits with some Paiute groups, which informants from
[114] other Paiute groups denied, suggesting that variation among various Paiute
groups was as great as that between the Washo and the Paiute as wholes. My
own field work tends to show even more similarity in the area of political organization
than is revealed by Stewart, with a number of traits admitted by
W my informants which are denied in his work (Stewart, 1941, 406-7). Differences
N that do exist seem to be in large part attributable to influence on the
Washo from California and influence on the Paiute from the north and east,
[177] or south and east (see also Heizer and Elsasser, 1953, 4 and Spier, 1928,
1929 on Basin relationships).

Northern Paiute NR13

Thus the area in which the Washo lived was somewhat more varied W 182
than the territories of other groups, encompassing four life zones. This contrasted 22
to the condition of the Paiute as a whole, where some bands existed
in relative luxury for gatherers, and others occupied extremely inhospitable
areas. The Washo, as a whole, enjoyed a fairly favorable area for hunting W
and gathering. In aboriginal times there seems to have been little effort to [648]
drive other groups out of the area when they entered it to hunt or gather,
suggesting that the Washo felt they were amid plenty and that added exploitation
would not deprive them. This does not hold for their view of the pinenut
areas they utilized. They defended these with vigor, as they also defended
fishing sites. There appears to have been a sufficient supply of nuts to permit
very large gatherings in the fall at the beginning of the harvest season.

As with the Paiute, the Washo family appears to have been the primary W
unit of social organization. Families combined into bands that may or N
may not have had more permanence of membership than did those of the 592
Paiute. Informants insist that families decided the course of their yearly 621
movement independent of any band activities, either joining other bands or
going on hunting and gathering treks -- often as far as the Pacific coast --
by themselves.

Band leaders had little, if any, more authority than did their counterparts W N
among the Paiute. When bands gathered for antelope or rabbit hunting 621
a shaman or rabbit boss took charge of the actual hunting operation as was [624]
true elsewhere in the Basin. Mountain sheep and mule deer were hunted in [224]
small informal groups, the latter occasionally in communal hunts.

The Washo recognized different areas within their territory but to W
what degree people or bands remained within these territories is not known. 628
Lowie (1939, 301-52) sees incipient moiety formation in this division, but 619
its only expression appears to have been the selection of members of teams [616]
to play games during the annual pinenut festival. Certain groups living in
the mountains near what is today Woodfords were viewed by other Washo as
"crazy," i.e., particularly brave, unpredictable and fierce. This was because,
according to informants, these people had a great deal of association W
with California tribes (Downs, 1961b). The Woodfords group appears to have [701]
served traditionally as Washo "shock troops," being called upon for help [648]
whenever it was necessary to fight neighboring Indians. Freed (1960, 353) [211]
reports that a leader could assemble fighting men by sending a knotted deerhide
string to his supporters. My own informants corroborated this but made
it clear that no one was compelled to respond. There is no record of interband
hostility even to the degree mentioned above for the Paiute.

Contact and Occupation

W
N
175
177
648

The initial contacts between white men and the Indians of western Nevada were sporadic and appear to have had little effect on the culture of the indigenous peoples.

To what extent either the Paiute or the Washo were aware of white men prior to first contact is unclear. It seems highly probable that the Washo had experienced some effects from the Spanish colonization of California. Certainly trips to the coast for shellfish were fraught with more uncertainty once the Spanish began forcible collection of Indians for missionization. One suspects that in the period immediately preceding direct white contact, groups such as the Ute may have been active in the Basin, taking slaves for the Spanish in the Southwest, which might have contributed to the initial shyness of Basin groups when confronted with white men.

From the 1820's until the 1840's a number of expeditions -- mainly fur hunters exploring new territory or on their way to winter in California -- entered western Nevada. According to Steward (1938, 6) Ogden probably visited the Humboldt River area between 1826 and 1828. The famous mountain man Jedediah Smith crossed Nevada in 1825. Bonneville pushed as far as Pyramid Lake in 1833, and Walker was in that portion of Nevada by 1833 (Steward, 1938, 6). If we are to judge from the nearly complete lack of information, these people had little or no contact with the Indians of the area.

Even in later peiods the Indians of the Basin were given little attention by travelers. Nearly naked, digging for roots, often starving in the winter, with no shelter save brush houses and with almost no tools or accoutrements, they were contemptuously lumped together as "Diggers" and ignored. Early writers, travelers and officials tended to distinguish between those Indians who rode horses and those who didn't, the former being "Snakes" or "Shoshonis," and the latter "Diggers." Upon reading the descriptions of the condition of these peoples one is led to suspect that at least some of the anthropological thinking about the Basin has been colored by a second-hand ethnocentrism. Early writers simply concluded that anyone willing to eat grubs, snakes, grasshoppers and roots must indeed be in the last extremities.

The 1840's mark a second and different phase of white-Indian contact in this area. Immigration into the west began to increase, and the route down the Humboldt and over the Sierras in the vicinity of Walker Pass, and occasionally Donner Pass, brought a number of trains directly through the territory of the Washo and the Paiute.

Two reactions appear common to both groups. One is avoidance; Washo tradition tells of watching wagon trains from hiding. Similar evidence from the Paiute supports the notion that they too were unwilling to associate with the travelers.

W
N
175
177
648

The second aspect of contact behavior was that of exploitation. The Paiute and Shoshoni in particular found wagon train livestock excellent sources of food. A hidden hunter would shoot several arrows into a straggling horse or cow and flee before he was located by the white men. After waiting until the white men were well out of the area the Indians would descend on the wounded animal, which, of course, had to be left by the travelers.[2] The Washo report that their first view of a cow was when they found one strayed from a wagon train. They packed the animal, rode it, generally examined it, and eventually killed and ate it. This suggests that the Washo had been watching passing wagon trains or had in other ways learned about riding and packing (Lowie, 1939, 302).

The 1850's marked still another phase of the contact situation, that of permanent occupation. The wagon routes provided incentive to establish posts in eastern Nevada, and one was set up in Eagle Valley in the 1850's. Prior to 1852 a man named Clark had set up a ranch in Carson Valley. This he abandoned in fear after he killed an Indian, probably a Washo. In 1853 another family occupied the Clark Ranch. When a group of Indians -- again apparently Washo -- appeared demanding food, the householder shot one of their number (Angel, 1958, 145-9). I am inclined to think that the hostile intent of the Indians was small and that they were begging food in a manner that became common in later years. This suggests that the Indians viewed the apparently bountiful supplies of the white man as simply another source to be exploited by gathering (i. e., begging). In addition it reveals a distinct conflict in cultural attitudes. Sharing among these peoples was a common characteristic. It appears that in hard times there was no obligation to feed a visitor, but asking for food was certainly not considered a violation of norms.

W
175
177
648

W
[183]
[476]
[574]
[735]

Between 1849 and 1851 Mormon colonists, sent out from Utah, established an agricultural community at Genoa. It appears that during this period Washo Indians established settlements around white habitations, utilizing the trash heaps as a source of food and building materials, and receiving handouts in return for odd jobs. An important unanswered question is whether the population of these settlements was permanent. I suspect that although the settlements remained at approximately the same population level there was a great deal of moving in and out by individual families going to other parts of Washo territory to hunt or gather. Estimates of Washo population appear to have been generally very low and often based on the

W
175
177
361
648

W
[161]

2. I am indebted to Professor R. F. Murphy for information concerning Basin Indian "hunting" of wagon train stock (see also Angel, 1958, 145-9).

Northern Paiute NRB

W
175
177 number of people living in these settlements (Mooney, 1896; Kroeber, 1925).
648 It is at least possible that a great many Washo lived in the mountains and other
361 areas not generally visited by white men and went unnoticed.
[161]

The year 1857 marks the discovery of the Comstock Lode and a dra-
N matic change in the history of Nevada and of the indigenous populations. The
W primary activity of the white man shifted from a rather casual form of frontier
175 pastoralism to an intensive exploitation of the mountains for silver and gold.
Mining and the servicing of mining populations became the primary occupation.
177 The flamboyant history of the Comstock has overshadowed the other activities
648 of white men in the area at the time. Perhaps of equal importance to the study
at hand is the rapid increase of stock raising.

Angel (1958, 67) reports that 10,000 head of cattle, horses and hogs were pastured in the general western Nevada area in 1860. The poor condition of the animals and the number of carcasses seen on the range is mentioned. This would suggest that the range was subjected to rather serious overgrazing, which must have depleted the grass and brush seed food sources of the Indians, as had Mormon ranching in Utah (Steward, 1938, 14). It is probable that the Paiute suffered more from this than did the Washo.

The Humboldt and Pyramid Lake region lies largely in the Artemisian life zone, which is characterized by xerophytic plants and few grasses or other possible food sources except after relatively heavy rains, or along the margins of watercourses and lakes. Since there are three large bodies of water and three rivers in the area we can assume that the Indians drew much of their sustenance from the edges of the water. Cattle would, of course, seek out the same areas and drastically reduce the supply. Moreover, Indians report that many areas now covered with useless plants were grasslands prior to the introduction of cattle or other livestock (Steward, 1938, 17). Even light grazing in such an area would seriously deplete, if not totally destroy, the food sources of the area. It is obvious that Indians occupying the area during their annual food circuit would be forced to move or make adjustments to the changed conditions. Judging from the population density figures for this area, the migration cycle may not have been too extensive, centering around the three lakes and the river banks, and shifting markedly only in the fall for pinenut harvests. The sudden introduction of cattle would have seriously upset the ecology. It is significant that the Paiute of this area were among the first to begin raiding white herds and habitations.

W
[137] The Washo, on the other hand, lived in a territory that comprised four life zones, Alpine, Aspen; Pinyon and Artemisian. A depletion in the Artemisian zone due to grazing might be partially compensated by greater dependence on other life zone sources and by utilization of white settlements as a food source.

N
W
175
177
648

as a food source. It is possible that the Washo did not rely as much on the Artemisian sources and therefore were not as seriously discomforted by cattle grazing as were the Paiutes. It is during this early period of white intrusion that we see Paiutes also becoming hangers-on around white settlements and becoming dependents of individual white ranchers (Steward, 1938, 8). N [361]

W
N
[182]

The above-described alteration of the environment is significant in terms of differential response because it operated fairly uniformly on all the Washo, while Paiutes began to experience inequalities of opportunity in various bands. This, we might postulate, could have led to new band alignments among the Paiutes as families left bands in depleted areas to join bands in more provident areas. Secondly it might lead to interband friction if entire bands attempted to operate as entities in areas where others had habitually gathered and hunted.

This period marks the first distinct differences in response to white occupation between the two groups.

W
[361]

The Washo apparently continued in the same patterns that they had earlier. Numbers of Washo gradually drifted into the Indian towns on the outskirts of white settlements. Others, in bands, began to reside more or less permanently on ranches, becoming dependents of individual white ranchers. In return for odd jobs and, perhaps, as a bribe to prevent theft, the Indians received handouts. Their hunting activities were appreciated by whites because they helped reduce the wild animal competition with domestic animals for grazing. An additional factor may also have been that a band of Indians made women available to cowboys and ranch hands, an important element in a woman-short frontier area.

Property lines, railroads and lumber flumes interrupted the migration trails of the Washo, upsetting the traditional band-land relationship. Although gathering and hunting continued, it appears to have lost its quality of organizing Washo life.

W
[562]
[464]

In the bands that squatted on the property of ranchers, women appear to have become the foci of social organization. This is probably because they were able to earn money as housekeepers, kitchen help and casual prostitutes while remaining with the family unit, but men were forced to leave the family to earn money in seasonal farm labor, lumbering, woodchopping, construction, hunting and fishing.

N
175
648

The 1850's mark the beginning of Paiute hostility toward the white man. Bands of mounted Paiute under the leadership of war chiefs began raiding herds, attacking outlying ranches and harassing wagon trains.

Northern Paiute NR13

175 648 The history of the Paiute War of 1858 as presented in Angel (1958) gives some significant information about the earliest stages of this development of hostility as a response to white contact. The first raids on white horse herds and ranches appear to have been conducted by Shoshoni, part-Shoshoni or Bannock visitors among the Pyramid Lake Paiute. These interlopers were aided by a number of Paiute men but the general Paiute reaction was to make every effort to stop the raids in order to avoid trouble with the white men, the Paiutes having already learned that disputes among whites as well as between whites and Indians often led to gunplay and bloodshed. In at least one case the Paiutes murdered a Shoshoni who refused to stop his raiding (Angel, 1958, 150).

However, the fat was in the fire after the early raids and any missing stock, whether strayed, taken by a white man or a single Indian, or actually lost to a raiding party, was credited to the Indians and punitive action was taken. Armed posses raided Indian camps in retaliation for real and fancied wrongs. The Indians began to reply in kind, and the skirmishing hostility developed into full scale war. The formation of war bands among the Paiute led to increased band size, the development of leaders with real authority and at least some interband rivalry. Definite territories became associated with particular bands and real band identity developed (Steward, 1938, 249; Stewart, 1941). [621] [178] [423]

In 1858 a volunteer regiment of miners, ranchers and citizens of the various settlements mounted an expedition against the Paiute and, as is often the case with volunteer regiments, was soundly defeated. In 1870 the Paiute were finally defeated and contained on reservations by federal troops.

177 114 231 178 621 Julian Steward (1938, 1955) has postulated that the introduction of the horse was largely responsible for the formation of what he has called composite raiding bands from a society formerly organized in bilateral hunting groups. Although the horse certainly played an important role in this development, Steward's theory leaves a number of questions unanswered. Foremost is the question of why a similar pattern failed to develop among the similarly organized Washo confronted with almost identical situations. This question is intensified when we realize that the hunting and gathering Pit River people did not adopt the horse ("because they were afraid of horses") until the late 1860's although the animal was available (de Angulo, 1950, 331). Thus, of the tribes that confronted the white man in western Nevada and eastern California, only the Paiute adopted the horse and reorganized their society into war-oriented bands.

This fact is significant in theoretical terms and equally significant in explaining the course of acculturation in this area in the period after 1870.

9: d'Azevedo et al.   E-4.5   (1952-1961) 1963   NT20 Washo NT20

Northern Paiute NR13

History and Ecology

It is significant that the instigators of hostile action against the white N 648
man were not Paiutes, although these peoples appear to have experienced a
rather extreme deprivation at the time. The leaders of the first war raids N
were Shoshoni and Bannock, or Paiute offspring of intertribal matings. The [563]
reason for the presence of these sojourners is unclear but the subsequent
history of intertribal relationships in the Basin reveals, in addition to fighting, a great deal of visiting, intermarriage and trade among Basin groups, N
particularly those speaking Shoshonean languages. It is my contention that
these relationships were based in a previous ecological commonality shared W
by the peoples of the northern Basin and Plateau, rather than on linguistic [182]
ties.

The hypothesis of a common ecology is based on the earlier distribution of bison in the Great Basin, particularly in northern Nevada. Since much N W
of the argument of this paper is based upon the assumption that buffalo did at 136
one time exist here it would be advisable to examine the evidence for such 182
distribution.

Archeological and ethnographic studies have produced, incidentally to N
their major concerns, some evidence for the relatively recent presence of W
bison in northeastern California (Riddell, 1952) and northwestern Utah 114
(Steward, 1937) but no indisputable evidence for their existence in Nevada. 136
However, the evidence supplied by zoologists and natural historians seems 174
to demonstrate that the buffalo did at one time, perhaps until as late as the 182
first quarter of the last century, exist in Nevada.

Allen (1877) cites evidence of the recent presence of the bison from northern Utah to northern California and states unequivocally that the probable range of the bison as late as the 1820's extended to the Sierra Nevada. After an ambitious but admittedly incomplete search of historic material as well as a voluminous correspondence with missionaries, government officials, pioneer settlers, and others, he argues that the area between 40° N latitude and 39° N latitude marked the southern limit of the westward range of the bison. This line passes through the northern tip of what seems to have been Washo territory. However, at that latitude Washo occupations appear to have been in the higher elevations not normally occupied by bison. Allen's arguments are supported by Hornaday (1887), Garretson (1938) and Seton (1928, 646-7). Steward presents a map (1938, 14) showing a southern limit for buffalo almost to Humboldt Sink in A.D. 1500.

Hall (1946, 644) lists the bison among those species that might possibly have occurred in Nevada but for which satisfactory evidence is lacking.

N
W
136
174
182
114

Zoological evidence tends to corroborate such secondary evidence as geographic locations with "buffalo" names and the traditions reported by Indian informants (Steward, 1938, 14).

Roe (1951, 282) felt the evidence did not justify establishing the western range of the bison in California. However, it would seem his caution is no longer called for in view of Riddell's information. Haines (1940) argues that the bison was not present in California and far western Nevada, but in light of later evidence and because of the limitations of his own argument it seems justifiable to discount his position. Haines accepted only historic documentation and discounted the opinions of zoologists and naturalists as well as some admittedly scanty but nonetheless real ethnographic suggestions. Having found no documentation, he was then forced to explain away Indian tradition and the existence of bison skulls. This he did with two separate and contrived suppositions (Haines, 1940, 397-8). Not only does he convert negative evidence into positive evidence, he attempts to explain away existing positive evidence in order to support assumptions based on negative evidence. Considering the nature of the evidence available it would seem that the only truly valid argument against bison's existing in the area would be one put forth by a biologist that it was impossible on ecological grounds for bison to have existed there. To my knowledge no such argument has been advanced. Thus it would seem, after an examination of the existing positive evidence, drawn from history, zoology, archeology and ethnography, that it was highly probable that the bison ranged from northwestern Utah to northeastern California down to 40° N latitude in comparatively recent times.

N
224
182

If we add the bison to the ecological picture previously painted for the Paiute we can postulate a far more rewarding subsistence level than was known in post-Caucasian times. The pursuit of buffalo, and the common patterns of gathering suggest that the relationships of the Shoshonean-speaking peoples were closely connected to their common ecology. However, by perhaps 1800 or shortly afterward the bison had disappeared from Nevada except possibly for small groups. This disappearance created an area of ecological imbalance in the southern portion of what had been the bison range. The Paiutes of this area were forced to seek alternatives to the buffalo and were probably oriented in the direction the buffalo had retreated. This may explain in part why the numerically inferior Washo were able to maintain themselves surrounded by the Paiute. The points of friction in the Pine Nut Mountains seem to be the only evidence of Paiute attempts to encroach on Washo subsistence save for occasional hunting and fishing forays into the Sierras.

N
W
[648]

N
231
177

The introduction of the horse into the Basin in the late 18th century, through the agency of Comanche-Shoshoni trade (Ewers, 1954, 11) gave the

northern Basin people an ecological alternative on one hand and increased the N
destruction of buffalo west of the Rockies on the other. Thus the horse-owning 177
Shoshoni and Bannock pursued the bison across the divide and adapted to a life [231]
as mounted nomadic buffalo hunters. The colorful and dramatic population in the Plains may have obscured the relationships maintained between these groups and the "miserable Diggers" of the Basin. One must remember, however, that although buffalo were plentiful on the Plains the area was sparse in other food sources. The Basin offered a far wider variety of plant foods and fish as well as small game.

There is ample evidence that the Shoshoni, particularly as people armed with guns entered the Plains, were forced to move westward, and spend at least part of the year in a modified Basin existence. However, these people were essentially Plains Indians in attitude and had developed the war complex, with its emphasis on personal glory, coup counting and horse raiding as well as the larger band organization needed to support military activity of this nature. For whatever reason individual Plains Indians found themselves in northern Nevada it seems completely logical that they would go on acting like Plains Indians. There were no bison to hunt, but cattle ranged widely and there were many horse herds owned by whites. Such people were probably high prestige figures among the Paiute, who were suffering from want and were without large numbers of horses. The behavior of these visitors served as a model of alternative behavior for Paiutes, who had in fact been seeking alternatives since the disappearance of the bison.

N
This behavior, however, presented a different picture to the white man 177
than had the inoffensive scavenging and begging and pilfering of the pre-raiding 648
band days. Large bands of Indians riding down on ranches, harassing wagon trains, waylaying travelers and running off stock could be viewed only as enemies. Enemies were met with force and, once defeated, were contained on reservations.

The White Man: Culture without Society W

N
In discussing Paiute and Washo we have spoken of two social systems 175
bearing distinct yet generally similar culture, and in examining the changes 177
that took place among these peoples we have discussed both cultural and social changes. However, in speaking of the white men who entered western Nevada 648
in the first half of the 19th century it seems that we cannot meaningfully speak of white society and its impact on the culture or society of the Indians. Certainly Jedediah Smith and Zenas Leonard were not extensions of American society nor were the hordes of rootless fortune-seekers who entered the

Northern Paiute NR13

W
N
195
177
648

country after the discovery of the Comstock Lode. Essentially these people were social fragments bearing the ideational systems of American culture. American society as a real entity ended roughly at the Mississippi River. Needless to say, these men did not exist outside the social level of human experience but formed small, often short-lived, social systems to meet the exigencies of frontier life or, as did many of the mountain men, they joined existing Indian societies. The important issue is that the culture borne by these intruders set the pattern of their social organization. When social groups formed they were created along lines directed by American norms but those lines were adjusted to fit the situation as it existed in western Nevada and were a far cry from the social lines drawn in New England or Ohio. Illustrative of the above argument is the behavior of the volunteer regiment called up by Nevada to fight the Paiute. The organization was formed of companies drawn from the various settlements in the area. In keeping with American volunteer military tradition of the 19th century each company elected its own officers. However, so fiercely did each settlement prize its independent existence that the entire regiment refused to elect a colonel and marched to war without a leader, a loose alliance of the military elements of a number of small "societies" (Angel, 1958, 153). One might suggest that the acceptance of federal troops as an agent of defense against Indians marks the inclusion of a frontier settlement in the broader framework of American society from the position of a culture-sharing social isolate. Thus, in these crucial years of white-Indian contact, what was affecting Indians was not white or American society but American culture as brought west in the minds of fur trappers, ranchers, farmers and gold seekers. This argument becomes significant if we continue our attempt to relate the behavior of the Washo and Paiute to explain the differences in white response.

W
175
648

The Washo failed to take hostile action in any concerted form against the white man and are said to have voluntarily turned in their weapons during the Paiute wars to avoid being mistaken for hostiles. Others of the Washo joined the white forces as scouts. This alliance was in part a result of the Washo's -- as well as the whites' -- having suffered raids by mounted Paiutes (d'Azevedo, personal communication).

The white response to this behavior is of two sorts. First, because they were not a threat and continued to live in the manner to which the whites were accustomed to seeing them -- as dependents and squatters, day laborers and root diggers -- there appears to have been no development of a white consciousness of the Washo as a tribe or any kind of a real social unit. They were simply "Indians." A second type of reaction was that of despising Washo because they had not fought. Here we see a culturally determined attitude. Although Paiutes fought and killed white men they were responding in a way the white men felt they would act themselves. The Washo, because

they did not resist white intrusion, were viewed as less than people, cowardly, W 175
without pride and unworthy of consideration. Because the Washo failed to
demonstrate their unity as a people by military action they were not consid- 648
ered a unit, and it was not until the last decade of the 19th century that land
allotments were made for them.

The foregoing discussion of differential responses on the part of the N 175
Indians and on the part of white men toward Indians explains in large part the 177
differences in acculturation subsequent to 1870 when the war-like Paiute were
contained on reservations. 648

As has been pointed out, the Paiute-Plains Indian relationships may well be due to the subsistence activities the two groups had shared in the past. The relationships as of 1858 served to give the Paiute a model of alternative behavior toward the white man, a model based on Plains Indian values and attitudes.

The Washo, however, lived almost entirely outside the buffalo terri- N W
tory. One suspects from this situation that the environment of their area was 177
one that had never included food sources besides those present at the time of
contact. We might then say that the Washo were in ecological balance. They 182
did not consciously or unconsciously turn toward peoples with a markedly dif- 22
ferent ecological adaptation as models of alternative behavior. This is one way of saying that the Paiute were ecologically oriented toward the north and east, and the Washo were ecologically oriented toward the west. Gathering may have been better in California and game animals more plentiful, but essentially the subsistence patterns were much the same as those of the Washo. Thus Washo peoples felt little or no influence from the Plains groups. They continued to look at the horse and cow as food animals to be eaten when possible, but saw no advantage in adopting the horse. The Washo did not totally reject the horse but accepted it only as a convenience in transportation. Many Washo eventually owned wagons and teams and rode horses but used them only within the framework of aboriginal Washo culture patterns and developed neither a new way of life based on the horse nor new values that they attached to the horse. (For a more detailed discussion of Washo response to animal husbandry and agriculture see Downs, 1961a.)

In the years subsequent to 1879 the Paiute response pattern continued N 175
to be colorful, and in many ways, effective. In the early 1870's the first 177
Ghost Dance was initiated at Mason Valley (Gayton, 1930, 57). This early 648
movement elicited no interest among the Plains tribes or the Washo but was 668
adopted by the seriously disorganized California groups. Shortly after this development the Paiute began to farm both on the reservation and off. A second nativistic movement, originated under Jack Wilson at Walker Lake in

Northern Paiute NR13

N
175
177 1890, was joined by the Basin and Plains tribes until the bloody termination
648 of the Ghost Dance at Wounded Knee Creek. At this time, according to
668 Mooney (1896), the Paiute were still living in brush houses with very few items
of white material culture except metal pots, guns and factory clothes. However,
W they had adopted both livestock-keeping and farming. The Washo once
[668] again rejected the Ghost Dance and only a few individuals joined Paiute groups.

W This double rejection of nativistic movements suggests that although
177 the Washo were often considered an almost extinct fragment of an Indian
182 tribe, hanging around the edges of white towns, they may in fact have made
648 what was in individual terms an adequate adjustment to white intrusion. This
adjustment, rather than taking the line of changing orientations displayed by the Paiute appears to have been of a continuous attempt to take advantage of the new situation in terms of the old patterns. The white man, I suggest, became another item of the environment which could be exploited. However, in order to carry out this kind of exploitation the old band-land relationship was gradually abandoned and with it any real behavioral evidence of social unity. Working for the white man was an individual activity carried out without reference to the band. Gathering in the areas where native foods remained became a competitive enterprise rather than one in which an entire band could take part. The demands of white employers and the restrictions placed on travel by barbed wire, private property and American concepts of trespass disrupted the old cycle of movement and increased the fragmentation of Washo society.

W
[622] Only once, in the early 1900's when the pinenut range was threatened,
the Washo were able to achieve enough unity to select a tribal chief to represent
[666] them. However, at his death the Washo were never able to agree on
W another chief. Modern field workers agree that the Washo appear to be singularly
[181] unable to agree on any unified action. Even the tribal council and
other such modern innovations appear to be more focal points of suspicion
[623] and disunity than elements of cohesion.

W The Washo attitude toward the white man still seems to be one of
177 avoidance and repressed hostility. In return, the white man treats the Washo
648 as a nuisance and an outcast. This is in marked contrast to the attitude toward
the Paiute, which is one of relative admiration for Indians who conform to the accepted and romanticized view of Indian behavior.

N The Paiute direction of change appears to have been two-fold. A
177 greater tribal identity appears to have developed, partially because of the
178 war bands and partially because of the reservation situation, which encouraged
619 the Indians to live and act as a unit with responsible leaders. This increased
621 identity has accompanied a continued political unification locally

among the Paiute. At the same time there has been an acceptance of white N
culture in terms of agriculture and livestock-keeping which has placed the 177
Paiute within the American economic system as an identifiable ethnic group. 178
It is interesting, however, to note that the identification with Indians and as 619
Indians, among the Paiute, has resulted in the retention of very little from 621
aboriginal Paiute culture but instead has been marked by a gradual acceptance
of more and more of Plains culture, including dances, chiefs and war bonnets N
(Steward, 1933, plates). This Plains influence may in part explain the tendency 177
toward the development of political organization among the Paiute. The 62
first war leaders, the Shoshoni, were men of prestige; thus, traits they introduced were accepted readily by the Paiute. A corollary of this was the ac- 554
ceptance of the idea that chiefs were men of prestige per se so that even the
peace chiefs, i. e., leaders of the anti-war factions who were influential in
postwar Paiute life, served as prestigeful culture-bearers. Among the Washo, W
however, the various "captains" utilized by the whites as points of communi- 177
cation with the Indians appear to have been largely without prestige or particu- 554
lar status among their own people. As these men often took on airs, came to 622
believe their own importance and began to call themselves "chief" the Washo tended to look on them as buffoons or worse and tended to reject any attempt to introduce new ideas through such men.

In contrast to Paiute Indian identification, there appears to be among W
the Washo a reluctance to admit to Indian practices and values. Although 177
there is a relatively high degree of use of aboriginal foods the Washo tend to 178
deny this and often refuse to admit they like or ever eat such foods. Bedrock mortars are often located under brush to escape white notice.

Summary and Conclusions

N

This paper has attempted to describe the pre-contact situation and W
post-contact developments in western Nevada. We have seen that at the time 105
of the entry of white men into this area the indigenous population was composed of two major groups, the northern Paiute and the Washo. As we have seen, these two peoples had made generally similar ecological adjustments, depending on hunting and gathering for subsistence. Culturally the Washo appear to share a number of traits with California tribes and seem to be more oriented toward the west than were the Paiute. Socially the two groups were organized in roughly the same manner: independent families operating together in small, loosely structured bands under headmen who were largely without power. Authority roles, such as antelope shaman and rabbit boss, were short lived and functionally specific. Communal hunts provided a basis for the amalgamation of a number of bands for short periods. Large supplies

Northern Paiute NR13

N W 105

of plant food such as the pinenut also provided a basis for the coming together of large numbers but without the creation of special leaders.

N 105 177 178 648

The entry of white men was met in much the same manner by the two groups: avoidance on one hand and an attempt to exploit on the other. In the 1850's the Paiute developed a new social structure, based on the horse, and territorially oriented mounted war bands began attacking the white man. This hostile activity went on until 1870 when the Paiute were finally defeated and contained on reservations. After a short-lived nativistic revival the Paiute, on and off reservations, began to farm and raise livestock. Another nativistic revival occurred in 1890 and spread throughout the Plains tribes. Since that time the Paiute have continued to develop as farmers and ranchers, rather rapidly abandoning many Indian practices. On the other hand they have retained a strong indentification as Indians and tend to emphasize the more colorful aspects of being Indians through the retention of dances and ceremonies, many of them of Plains inspiration. The relation of the Paiute to the white man has been largely friendly since the cessation of hostilities and the Paiute is generally tolerated, and a few exceptional individuals respected, by the whites in Nevada. There has been a steady increase in the degree of tribal political organization over the entire period of contact.

W 105 177 178 648

The Washo appear to have attempted to continue the first response pattern with only a shift in emphasis during the past quarter century. Avoidance and exploitation have gradually given way to dependence, economic involvement and segregation of the Washo. The aboriginal band-land relationship broke down, but attempts to maintain modified bands as squatters on individual ranches continued until the 1920's. Hunting and gathering continued and still goes on. However, tribal organization, however slight it may have been, seems to have been lost. The failure of the Washo to unite against the white man seems to have resulted in the latter's failure to take notice of the Washo as a group. Since the reservation system was never instituted for the Washo, they remained squatters until the early 1900's and then were assigned scattered allotment lands. The attempt to adjust individually to the new situation appears to have led to a general fragmentation of Washo society. Certain ceremonies and shared cultural values identify Washo but a high degree of suspicion and disunity are characteristic of the group. Factions spring up

W [106]

over every issue: how to deal with the white man, the creation of a tribal council or a Peyotist movement. There is a general tendency to attempt to hide or deny specifically Indian traits. In general the relation of the Washo to the white man is that of avoidance wherever possible, and of ill concealed hostility and suspicion on both sides of the fence.

N W 105 177 178

Materially both groups have accepted a great deal from the white man. Wooden houses have replaced native shelters. Factory clothing is worn.

Northern Paiute NR13

N
The automobile is used by both groups. Only a few old women among the W
Washo still weave baskets. Gathering lore is still passed on among Washo 105
women, although there is a tendency to hide this from whites. Only the bed- 177
rock mortar, basketry, pinyon picking tools and rabbitskin blankets seem to 178
have survived as useful items in modern Washo life. The colorful parapher- W
nalia of the Peyote Church is, of course, inspired by modern Peyotists and does [186]
not represent aboriginal Washo survivals. The Washo have turned to day- [668]
labor and odd-jobbing for economic support and have rejected agriculture or [464]
ranching, although there is a growing admiration for the cowboy. The Paiute
have become to a large extent relatively successful farmers.[3]

Washo change, then, can be characterized as an attempt to adapt aboriginal patterns to the new situations created by the entrance of the white man.

The Paiute, on the other hand, must be described as attempting to find new orientations of social and cultural behavior to meet the changing situation. We see three major shifts in Paiute activity over the past century.

The differences in response have been related to historic relationships with other Indian groups which have their basis in the distribution of the buffalo.

N
It has been suggested that the buffalo once extended much farther south 105
and west than they did in the 1840's and that the Paiute shared a common eco- 177
logical adaptation with other peoples in the northern part of the Basin. The 182
withdrawal of the bison created two environmental zones but did not break off intertribal relations based on the former common subsistence patterns. Thus, when the Paiute were further impoverished by the introduction of white livestock into their gathering areas they responded by taking up the horse and a modified war complex, as revealed to them by visiting Shoshoni and Bannock, and entering into hostile actions against the whites. This led the whites to treat Paiutes as a unit, and, after their final defeat, to assign them to reservations. The reservation system not only emphasized Paiute unity and encouraged political development but also provided land for farming.

The Washo, on the other hand, lived largely outside the area of buffalo W
range and therefore suffered no loss or ecological imbalance because the big 105
animals became extinct in the region. Their response to the white man was 177
simply to attempt to utilize what he brought into the new area and to modify 182
the relatively successful Washo adaptation as little as possible. As a result, Washo organization, based on ecology, broke down as the ecology changed. The Washo lost even the minor tribal structure they had once had; bands changed and finally disappeared. The lack of unity prevented this group from

[3] This success must be viewed in relative terms. It is more accurate to say that the Paiute think in terms of stock raising and farming but most Washo do not.

Northern Paiute NR13

W
105
177
182

obtaining lands on which to farm, and allotment lands, scattered and unsuitable for farming, were obtained only after the turn of the century as a result of a single short-lived period of semi-unity under a single head.

N
W
105
177
648

What is suggested is that the Plains Indian relationships of the Paiute provided them with a model of behavior which influenced white men's attitudes and actions toward them in such a way that the opportunity for reorientation was presented. The Washo, without models of alternate behavior, made attempts at adjustment which were successful to some extent but caused the whites to ignore and despise them.

W
105
177
178

Thus the Washo remained scattered on allotments and continued squatting on public and private land totally unsuitable for agriculture and stock raising. Without a reservation, or at least relatively undisturbed occupancy of extensive lands, the Washo were unable to seek alternatives in stock-keeping or farming and were forced to attempt adjustments in terms of interacting with white society as an ethnic minority.

Notes

N
W
114

1. The ideas in this paper were first expressed by the author at the Third Annual Meeting of the Kroeber Anthropological Society, May 16, 1959, Berkeley, California. In a more complete version it was later presented in the Seminar on Acculturation given by W. L. d'Azevedo in the spring of 1959 at the University of California, Berkeley.

W
[122]

Subsequent to that time the author has conducted field research among the Washo, supported by the Woodrow Wilson Foundation and the Department of Anthropology, University of California. The present form of the paper has been developed since that time. I am particularly indebted to W. L. d'Azevedo for his encouragement of my Washo studies and for access to his extensive field notes and observations. The concepts developed here are, however, those of the author.

000

2. I am indebted to Professor R. F. Murphy for information conerning Basin Indian "hunting" of wagon train stock (see also Angel, 1958, 145-9).

3. This success must be viewed in relative terms. It is more accurate to say that the Paiute think in terms of stock raising and farming but most Washo do not.

Bibliography

Allen, J. A.
1877 *The History of the American Bison.* Office of the Geological Survey of the Territories, Washington.

Angel, M. (*Ed.*)
1958 *Reproduction of Thompson and West's History of Nevada, 1881.* Howell-North, Berkeley.

Downs, James F.
1961a *The Effect of Animal Husbandry on Two American Indian Tribes.* Ph.D dissertation, University of California, Berkeley.

1961b Washo Religion. *University of California Anthropological Records,* Vol. 16, No. 9.

de Angulo, Jaime
1950 Indians in Overalls. *Hudson Review,* Vol. 3, No. 3, pp. 327-77.

Ewers, John C.
1955 The Horse in Blackfoot Indian Culture. *Bureau of American Ethnology, Bulletin,* No. 159.

Freed, Stanley A.
1960 Changing Washo Kinship. *University of California Anthropological Records,* Vol. 14, No. 6, pp. 349-418.

Garretson, M. S.
1938 *The American Bison.* New York Zoological Society, New York.

Gayton, A. H.
1930 The Ghost Dance of 1870 in South-Central California. *University of California Publications in American Archaeology and Ethnology,* Vol. 28, No. 3.

Haines, F. D.
1940 Western Limits of Buffalo Range. *Pacific Northwest Quarterly,* Vol. 31, No. 4, pp. 389-98.

Hall, E. R.
1946 *Mammals of Nevada.* University of California Press, Berkeley.

113

Heizer, Robert F., and Albert Elsasser
1953 Some Archaeological Sites and Cultures of the Central Sierra Nevada. University of California Archaeological Survey Reports, No. 21, pp 1-42.

Hornaday, W. T.
1887 The Extermination of the American Bison. Report of the United States National Museum for 1887.

Kroeber, Alfred L.
1925 Handbook of the Indians of California. Bureau of American Ethnology, Bulletin, No. 78.

Lowie, Robert H.
1939 Ethnographic Notes on the Washo. University of California Publications in American Archaeology and Ethnology, Vol. 36, No. 5, pp. 301-52.

Mooney, James
1896 The Ghost Dance Religion and the Sioux Outbreak of 1890. Bureau of American Ethnology Annual Report, No. 14.

Roe, Frank G.
1951 The North American Buffalo; a Critical Study of the Species in in the Wild State. University of Toronto Press, Toronto.

Riddell, Francis A.
1952 The Recent Occurrence of Bison in Northeastern California. American Antiquity, Vol. 18, No. 2, pp. 168-9.

Seton, Ernest T.
1928 The Lives of Game Animals. 4 vols. Garden City.

Spier, Leslie
1928 Havasupai Ethnography. American Museum of Natural History Anthropological Papers, Vol. 29, Pt. 3.

1929 Problems Arising from the Cultural Position of the Havasupai. American Anthropologist, Vol. 31, No. 1, pp. 213-22.

Steward, Julian A.
1937 Ancient Caves of the Great Salt Lake Region. Bureau of American Ethnology, Bulletin, No. 116.

113

1938 Basin-Plateau Aboriginal Sociopolitical Groups. Bureau of American Ethnology, Bulletin, No. 120.

1955 Theory of Culture Change. University of Illinois Press, Urbana.

Stewart, Omer C.
1941 Culture Element Distributions: XIV, Northern Paiute. University of California Anthropological Records, Vol. 4, No. 3, pp. 361-446.

WASHO RESPONSE TO ANIMAL HUSBANDRY

by James F. Downs

23
121
[114]

In this paper I will discuss Washo response, or more properly, lack of response, to a single aspect of white culture, animal husbandry. The data herein presented were gathered in 1959 as a continuing study of the impact of animal husbandry on human culture and society in which the Washo serve as a negative but nonetheless important example. The Washo were selected because reference to the literature and discussions with W. L. d'Azevedo suggested that the Washo response to the introduction of livestock was very different from what has come to be accepted as usual in the western part of the North America. This response appeared even more notable when compared to the reaction of the nearby Paiute and Shoshoni groups, which served as a basis for a considerable body of theoretical speculation (Steward, 1955).

By examining a negative case I hope to demonstrate at least some of the adjustments and adaptations necessary in a society, previously without animal husbandry, before animal husbandry can be successfully incorporated. I shall not attempt to explain why the Washo failed to make such adjustments except by a general reference to the arguments outlined elsewhere, which, although they suggest a reason for a difference in response between the Washo and their neighbors, do not offer explanations for the exact course of the Washo response.

In the interests of brevity and clarity of argument I shall not attempt to reconstruct the entire process of change as it has taken place since the 1840's, but shall limit the discussion to the immediate question of animal husbandry.

Contemporary Washo

177
648

The Washo today can be viewed as a socially assimilated people. That is, the Washo have not developed institutions within their own society in response to the changes brought about by white occupancy of their territory. Law enforcement is carried out by the county officials in the counties where the Washo reside, and offenders are tried in local and state courts (although, in theory, crimes committed in the Dresslerville community should be dealt with by the Federal Government). Education for Washo children is provided by local schools in Nevada and California. Old age and blindness pensions are paid by the states involved, and, in fact, the choice of a homesite often is made in reference to the benefits paid by either Nevada or California. 177 Unemployment compensation is paid by the respective states, as is compensation 648 for injuries received on the job. The destitute receive assistance from state and county funds. Employment is sought in the same channels, public and private, as it is by white workers. The Washo drink in integrated cocktail lounges, gamble at integrated gaming tables and eat in integrated restaurants (although in all three instances certain establishments refuse to serve Indians).

The Washo tribe as a socio-political entity cannot be said to exist. A [623] tribal council of members elected from the various Washo communities is largely ineffectual. Tribal consciousness, insofar as it exists, centers on the possibility of sharing in an eventual settlement of the Washo claim against the government. Several claims and suits in the name of the tribe actually have been instigated by individuals. Except for the 40-acre Dresslerville community, there is no tribal land. The pinenut allotments are owned individually, [423] although the tribe holds a power of attorney to lease the land for grazing. This responsibility has in fact passed into the hands of the Indian agent at Stewart, Nevada, who receives and disburses the income from the leases.

There is no distinctly Washo economic occupational role, nor is there a separate Washo economic system. These statements should not be interpreted to mean that the Washo are enjoying all the benefits of modern white society without restriction or hindrance. The assimilation of the Washo by and large has been into the lowest and least privileged rung of the white social structure. Nor are the statements referring to social assimilation to be construed as an argument that the Washo have become totally acculturated. Although the Washo no longer exist as a compact social group, Washo culture, particularly in its less tangible aspects, has retained much of its viability, and the Washo form a clearly identifiable ethnic minority in western Nevada and eastern California.

Agriculture and Animal Husbandry

I did not discover a single family, indisputably Washo, that supported 241 itself by raising livestock or growing crops, although a number of them live 563 on holdings that would at least provide garden produce. One man near Woodfords [433] does plant and care for about 2 acres of corn, but he is considered "half-Maidu" by his Washo neighbors. His grandfather had indeed married a Maidu bride and the family has been considered deviant since then. Although he identifies himself as a Washo, he tends to participate only minimally in tribal affairs, and is a member of an American Indian organization long since abandoned by other Washo.

245 [247] Beyond this single farmer, the only attempts at cultivation I saw were a flower garden, maintained by the Paiute wife of a Woodfords Washo, and two small orchards. These last two efforts were made by men considered to be Washo, and consist of only a few trees which bear indifferently. I suspect that the Washo concern with trees, which is symbolized by a deep interest in pinyon pines and other fruit-bearing plants, might be directed toward a program of orchard culture.

[427] The Washo "Tribal Ranch," part of the Dresslerville community located in the bottoms along the Curom River, has never been operated successfully either by individual Washo or as a cooperative, and has for a number of years been leased by white tenants.

231 The dog, owned aboriginally, is ubiquitous in Washo settlements. Whatever distinctive features the pre-contact breed may have exhibited have long been submerged under a flood of bloodlines of every description since the appearance of European breeds. The animals are treated with kindness and are fed, often with commercial dog food, but driven out of the house
[224] should they attempt to enter. Dogs[1] serve only as pets and companions and apparently are not used in hunting.

235 Two families own barnyard fowl, one keeping them penned and gathering eggs, the other allowing them to wander freely about the homestead and occasionally killing one for the pot or frying pan. One family in Dresslerville maintains a tumble-down dove-cote that houses a number of pigeons. I could not find any practical reason for keeping pigeons except that the owners "just like them."

231 The common cat is a member of most Washo households. Generally the animals are allowed to fend for themselves, and many of them are missing toes or one or more feet or limbs, cut off by mowers as the cats prowl alfalfa fields in search of rodents. Their owners take a great deal of pride in a cat that is "tough" enough to survive one of these injuries and return home.

492
489 The last team of horses, and wagon, in Dresslerville was sold in 1928, and Washo transport became automotive or, as always, pedestrian. Older and middle-aged Washo show no interest in horses or riding, although some will bridle at the suggestion that Washo are not good riders.

231
177
541 Some Washo boys have become enamored of the western folk hero, the "cowboy,"[2][1] and show an enthusiasm for western clothes and a desire to own and ride horses. However, only two Washo boys participate in the frequent rodeos held in the area, and these, I was told by other Washo, were not very good and entered only the minor events.

[1] Dogs were used for hunting in early historic times and presumably[40-][1] aboriginally.

[2] [see footnote, p.150 -- Analyst]

231 not very good and entered only the minor events. Usually the Washo quite openly express the view that horses are a bother, and they seem to enjoy making remarks about the amount of meat the white man's prize mount might provide. On one occasion a Woodfords Washo had allowed a white man to pasture two horses in a fenced meadow, but he expressed relief that they were [177] gone. It might be mentioned that this man's half-Paiute son, exposed to the [233] agricultural curriculum of public school, wants to raise a sheep in the family meadow. His Washo father chooses to ignore the boy's importuning, but his Paiute mother encourages his ambition.

233 Only one Washo man appears to have attempted to raise cattle. Sur- 554 prisingly, he is a very traditional young man, respected by Peyotists, non-Peyotists, mountain, and valley Washo alike. He is perhaps the only Washo today who might conceivably develop into an effective and generally accepted tribal leader. His small scale cattle operation is conducted on an allotment near Woodfords, on the banks of the Carson River. He has purchased a small tractor with a cutter bar attachment and hay rake. He cuts hay for his [246] stock in his own meadows and those owned by his friends. In exchange for [313] the hay he assists his friends in gathering winter wood. This small cattle [478] enterprise is as yet too young to allow prediction of its eventual success or failure. It is being watched with patronizing interest by local whites. The [178] Washo, however, view the experiment as an unusual departure from expected Washo behavior. A few grudgingly admit that it might yet point a new direction for their people.

123 It should be mentioned that I found Washo attitudes, when asked about pets or animal husbandry, to be embarrassment, curt, almost hostile, reluc- 124 tance to comment, or confusion. Otherwise loquacious informants were apt 231 to lapse into speechlessness when asked about domestic animals. Informants who claimed an impossibly total recall concerning times past (often years before their birth) seemed to experience memory lapses when asked about horses or cattle. A man who discussed with enthusiasm the minute details of the life and habits of game animals lapsed into embarrassed silence when asked why he kept a rabbit in a hutch near his house. In fact, his only response to the question was to disclaim ownership and state that he was keeping it for a friend.

224 As stated earlier, not all Washo hunt, but almost all men retain a lively interest in hunting and wild animals. One informant, generally con- 825 ceded by other Washo to have hunting medicine, approached a discussion of native fauna with the enthusiasm and attention to detail of a zoologist. He invariably referred to the various species as if he were using a personal name, speaking of Wolf, Bear, Coyote, Deer, and using a personal pronoun. With obvious enjoyment he would describe the intelligence of various animals he

224
[825] had encountered and display understandable pride at having conquered them.
"Them old bucks that live around here . . . they are smarter than people"
was a frequent comment. In varying degrees this attitude was evident among
other Washo men. Details of hunts or feats of hunting prowess which occurred
[732] 40 years ago were recalled again and again. The contempt many of them felt
for an aged, usually drunk, and half-blind claimant for tribal "chieftainship"
[888] was often explained by a statement like: "He never hunted or nothing . . . so
don't believe nothing he tells you about it. He just hung around camp and
didn't do nothing."

233
825 A number of Washo expressed what might be described as an enmity
toward sheep. One might interpret this as an evidence of the common contempt for sheep in contrast to cattle. However, upon exploring this attitude, I began to feel that my informants viewed sheep as competitors who ate valuable food plants and spoiled good gathering areas. There would seem to be little difference between sheep and sheepowners in the Washo mind. If there
[262] is any difference it appears that more hostility is directed toward the animals.
Cook (1941, 48) reports a distinct aversion to mutton among the Washo.

231 One might explain the present low frequency of agriculture and hus-
241 bandry among the Washo as simply a result of the historic and political factors
311 that left them without land of sufficient quality or quantity to permit agricul-
177 ture or husbandry. However, an examination of the course of Washo history
since the appearance of whites in this area suggests that other factors play an important role in this situation.

231 Aboriginally the Washo kept dogs and used at least some of them for hunting. However, the number was small because of depredations of predators on litters of puppies. One informant recalls being told of collars made of flint points which were worn by dogs to protect them from mountain lions. In addition to dogs, eagles were trapped and kept for ceremonial purposes. All modern Washo are aware that one old man in early historic times attempted to keep captive fledgling eagles on cradleboards so they could be transported easily and raised to maturity. The experiment seems to have been a failure.

825 D'Azevedo (personal communication) reports that older informants told him of cutting the top boughs from trees in the winter to supply browse for deer herds and thus encourage the animals to remain in the area. Whether this was an aboriginal practice or an inspiration based on white husbandry practices is not clear.

241 Nor was agriculture any further developed than husbandry. Tobacco was not grown, nor was any action taken to encourage the growth of wild

grasses or other plants. The Washo were well aware that pigweed, an important 241
seed crop, grows profusely in areas that have been burned over, but
apparently no attempt was ever made to burn areas to encourage growth of
the plant.

Domestic Animals

We must assume that the Washo knew of domestic animals among the 177
Spanish and Indians of the coast (see Cook [1960, 243] on Indian horse tribes 231
in California), and in all probability among the Shoshoni, Ute and Bannock to
the east. However, Washo tradition is without mention of the introduction of
horses. A specific incident, which could not have occurred earlier than the
1840's, was related by my informants and was reported to Lowie (1939, 3).
A cow, or ox, strayed from a wagon train and was found by a party of Washo.
The Indian response was characteristic of Washo response to livestock ever
since. The animal was led, ridden, packed, teased, and then slaughtered
and eaten. This single incident constitutes the only reference to domestic
animals in the folklore of the Washo.

Questioning informants about Washo use of livestock proved to be one [124]
of the more tedious and unrewarding areas of investigation. Informants described
long journeys undertaken in the past century, and only the most persistent [492]
questioning revealed that the trips were made with a wagon and team.
The Washo still take great pride in their own and their ancestors' ability as [484]
pedestrian travelers. Even today, 5, 10, or 15 mi. walks are undertaken
quite casually by many Washo, particularly middle-aged and older people.
The earliest mention of Washo in connection with white livestock in the historical 175
sources is a newspaper account of an incident that occurred in the 177
1850's. A group of Washo ran off a number of horses belonging to some 231
white people attending a dance in Washo Valley. The guests broke off dancing, 648
mounted the remaining horses, and set out in pursuit. Less than 2 mi.
from the dance hall the posse found the horse thieves busily engaged in eating [262]
the stolen animals. Shots were fired and the Indians scrambled into the
darkness. There is an undertone of humor in stories of this nature. White
men are revolted by horse eating and are contemptuous, disgusted, amazed,
or merely amused by a people who see horses only as meat on the hoof.
Moreover, a lack of concern with the possible punishment for thievery seemed
so unusual to white men that it was humorous rather than enraging. Nonetheless,
the whites in Washo Valley tended to view the Washo as being more hostile
than in other areas. During the last half of the 19th century, scattered 231
newspaper references make it clear that at least some Washo owned and rode [175]
horses. Generally, news accounts suggest that most Washo were still

231 Generally, News accounts suggest that most Washo were still
[489] pedestrian. Modern informants in their fifties confirm this, and recall acorn
gathering, hunting, and pinenut trips made on foot. Older white informants
recall that the Indians had "a few" horses in their boyhood, which was in the
1880's.

177 Washo informants report that part of their recompense for assisting
222 in harvests was the transportation to the pinenut groves furnished by the
ranchers. This shortened the time consumed in traveling, and allowed the
492 Washo to pick more nuts because the return trip was also made in wagons
furnished by the whites.

175
177 Another newspaper account of the late 19th century reports that the
492 Washo of the Genoa colony borrowed a team and wagon in order to transport
764 the body of a well known Indian woman to the Indian cemetery.

Of other livestock there is no report. Cattle were probably killed and
177 eaten when opportunity or income made it possible, but no one, white or
423 Washo, can recall any attempt at animal husbandry. One suspects that any
[233] such attempt would have been quickly discouraged by white ranchers. There
was no long frontier period during which land ownership was ambiguous in
Nevada. Less than 20 years after the first settlement Nevada was admitted
as a state, and, soon after, stock laws that encouraged fencing and other
clarification of land holdings were instituted. Timber and water rights were
extremely profitable almost from the beginning of white settlement and were,
therefore, quickly secured by law and protected. Some of the Washo early
established claims under squatters' rights or homestead laws and secured
legally protected lands for themselves. However, most such claims were
made in areas considered as winter camps with reference to wood, water,
[313] and shelter rather than grazing. In later times such claims proved to be
[464] valuable for timber, and many Washo became profitably involved in the lumbering business in positions varying from lumberjack to timber cruiser,
buyer or hauler, laborer in lumber mills, and in one instance the owner of
177 a lumber mill. In the 1890's many Washo became owners of teams of horses
222 and wagons, which they used in their subsistence rounds. The acorn gathering trip to Big Trees in Calaveras County was made by several families at
492 a time. The traditional en route camping spots were often bypassed in favor
of locations with grass for grazing the teams. Similar trips were made to
Placerville to pick acorns. In both instances, these trips became possible
177 only after the whites had constructed roads over the mountains. Their involvement in the agricultural processes of white men had taught most Washo
971 men the basic techniques of driving teams hitched to mowers, hay rakes, or
wagons by the 1890's. Farm skills were taught at the Stewart Indian School,
[492] which for a number of years served only local Indians. However, most men

However, most men 177
who attended Stewart express resentment at being worked on the school farm, 241
although they evidence pride over their attendance and resent bitterly that 871
the school now serves Indians of many tribes. [86]

In the past and today, local white folklore holds that Washo are inex-
pert horsemen and cannot learn to be cowboys. I can neither confirm nor 492
deny this opinion, because I failed to see a single Washo on horseback dur-
ing my visit. One man, biologically if not culturally a Washo, owns a string [422]
of pack and riding horses which he rents to hunters for whom he serves as
guide. However, this occupation appears to be one of the reasons other [427]
Washo feel he has "gone on the white man's road." [178]

One significant but short-lived effect of the introduction of the horse 177
was that it permitted rabbit hunters to kill more rabbits than in pre-horse 224
days. Rabbit drives were usually conducted by men using bows and guns, the 492
net having been abandoned very soon after white contact. Each man carried
his kill on a belt that could hold up to 17 rabbits. A hunter with a horse
could have his wife, son, or younger brother ride or lead a horse behind
him to carry the kill. In this way, a good shot could take as many as 40 rab-
bits a day. However, the very nature of this utilization discouraged the
wider institutionalization of the horse. Following the hunter required no
equestrian skill and, in fact, was a secondary role to be abandoned as soon
as the rider, if he was a boy, was old enough or could afford a weapon of his
own.

Older informants recall that some Washo were hired as riders to ac- 464
company cattle herds to the railhead or into high range. It is significant that 492
they mention specifically that only this temporary type of herding job was
available and make it clear that no Washo became a year-round cowboy.

It appears clear from statements of informants that Washo quickly 177
adopted the automobile and abandoned wagons and teams. As Cook points 489
out, the automobile gave back to the pedestrian Indian a mobility he had lost
during the interval between the appearance of the whites and the development 492
of the automobile (Cook, 1941, 84). I feel that this change took place because
the Washo had never made the adjustments necessary to maintain horses or 493
other livestock efficiently, and therefore welcomed the automobile, which
ceased to make demands on its owner's time and attention as soon as he
turned off the ignition and got out. Moreover the appearance of the railroad 177
within a few years after the arrival of the whites obviated the need for the
horse for long-distance travel. Early day railroad "public relations" policy 489
permitted Indians throughout the West to ride without charge. In return, the
Indians often warned railroaders of broken track, washouts, and other
obstructions.

177
464
484

During the 1840's and '50's, and perhaps earlier, the Washo abandoned trading or gathering trips much beyond the eastern limit of the oak trees in California. Several unpleasant encounters with white gold washers had made them feel that the entire area was extremely dangerous. However, the lure of Sacramento, where many desirable items of white manufacture, including guns, could be purchased, plus the possibility of work in the fields in post-goldrush California, caused them to begin the trans-Sierran trips again in the last quarter of the 19th century. By this time the railroads had crossed the mountains. Washo would gather near a rail station in Nevada until enough Indians to fill a boxcar were present. The railroad officials then would assign them to an empty car and take them into California, often switching the car onto a siding to serve as headquarters for the Indians. During their stay west of the Sierra, the Washo worked on farms for money and food. In addition, they picked wild crops, particularly berries, to sell to white householders. When they wished to return, the boxcar was included in an eastbound train and the Indians returned to Nevada. Despite appearances of modernity, arrangements such as this required far less readjustment of Washo life and personal outlook than the complete adoption of the horse and wagon would have.

233
177

Sheep herding plays an important part in the economy of eastern Nevada, but the Washo have been involved in this activity even less than in other livestock operations. I have no record of a Washo's becoming a sheep herder, and, in fact, sheep are viewed as real competitors for natural plant foods, and the introduction of sheep into the area is viewed as a catastrophe. Most of the herds are owned by Basques, and a regular increment of Basque sheep herders is admitted to the United States to care for the animals. [517] It is interesting to note that in the summer of 1959 the most popular motion picture in the Gardnerville theatre, and the one most enthusiastically viewed by Indians and whites, was an imaginative epic describing the progress of a Basque wagon train through Indian country.

177
231
579
154

The identification of the white man with his animals is suggested in a late 19th century newspaper account of a young Washo who went on a "rampage" after an altercation with a white man. Rather than threatening or attacking white people, the Washo killed several dairy cattle belonging to a white farmer.

177
231

The material presented in the previous pages is sparse, because the history of Washo response to the animal husbandry complex introduced by the white man has been negligible. The response of the Washo was minimal and included only the most superficial aspects of the complex such as learning to ride and drive horses and acquisition of the minimum skills needed to maintain the animals. Husbandry, in the sense of learning the skills and attitudes needed to raise and maintain livestock, never found a place in the Washo way of life.

It is perhaps significant to recall that the earliest Washo experience 177
with livestock revealed a knowledge of the various techniques of using large 231
animals, i.e., riding, driving and packing. The fact that these experimental
techniques were used on an ox or cow rather than a horse is significant in
understanding the processes involved in the diffusion of animal-use techniques
(Downs, 1961c). With the exception that these techniques were finally trans-
ferred to the horse we can say that the Washo developed very little beyond
skills displayed in the first instance.

Although I cannot presume to offer a complete explanation of this situation, it would perhaps be valuable to attempt to answer the question of why the Washo did not respond to the potential of animal husbandry.

As a basis we may refer to the hypothesis set forth elsewhere in this volume, that for ecological and historical reasons the Washo tended to be oriented to the west rather than east. The great barrier of the Sierra offers little encouragement to the use of horses or the keeping of herds.

There also appears to be reason to hypothesize that Washo culture it- 177
self holds some of the answers to this question. From the very earliest con- 178
tact Washo response to the new alternatives presented by white culture and
technology has been to make a minimal adjustment of aboriginal behavior. 231
Thus the Washo in part continued their gathering, hunting and fishing cycle [361]
without permanent homesites until the 1920's, when the last nomadic band
became sedentary. White settlements were obviously viewed as sources of
food either through temporary wage labor, which utilized aboriginal skills
such as brush clearing and weed picking, or through attenuated gathering be-
havior such as begging, scavenging or theft. The livestock introduced by
white men was looked upon primarily as a source of meat. Even today the [433]
Washo tend to live in terms of aboriginal orientation toward subsistence, in-
volving a highly mobile opportunism that exploits the short term income pos-
sibilities of the economic system of western America. In the 19th century
this minimal adjustment produced real rewards for the Washo. As commer- 177
cial hunters and fishermen, harvest hands, brush clearers, woodchoppers, 464
ranch hands, casual prostitutes and kitchen workers, etc., the Washo ac- 433
cepted jobs that whites, who had come west to make fortunes in ranching or
even greater fortunes in mining or lumbering, did not care to perform. How- 231
ever, with the gradual restriction of hunting and fishing and the shift from 178
field agriculture to stock raising in western Nevada, the Washo found their [458]
skills no longer in demand, and they entered a period of economic depres-
sion which continues at the present time.

Although the present social, economic and cultural condition of the 177
Washo is vastly different from the condition of a century ago, it seems clear 178
231

177

178 that the shift has been gradual, with each adjustment a relatively minor one
231 when contrasted to the stage immediately preceding it.

On the other hand, the adjustments needed to adopt animal husbandry as a basis or even important adjunct to the Washo economy would have required at one time or another a major shift in orientation, the abandonment of certain aboriginal practices, and the adoption of many new skills and values. This major shift the Washo did not make, continuing instead their gradual adjustment to changing conditions until they became inextricably involved in the socio-economic system of the area, and no longer in a position to undertake any large scale experiments in husbandry.

124
231 In questioning informants about domestic animals and the earlier relationships between domestic animals and the Washo, one trend becomes increasingly clear. The Washo are for the most part uncomfortable when involved in such a conversation. Description of the details of their behavior in this regard must perhaps await psychological testing, but it is clear that for the most part this is an experience they find uninteresting and unpleasant.

281
825 The explanation of this attitude may well lie in that area of Washo
773 culture which appears to have survived most completely. The Washo world view and related attitudes about the supernatural and the nature of the world are clearly aboriginal and have been little affected by white contact (Downs, 1961b). An integral part of these aspects of Washo culture is a view of the nature of the animals man encounters in this world.

771
177
171 The Washo view of the animal kingdom is similar to that of many other Indian tribes in the West. Animals are the product of acts of creation essentially similar to that which produced man. At one time the prototypes of the animals lived as part of the human social system, conversing and interacting with mankind. As essentially the same class of being as man, animals are subject to many of the same laws as man, and are the possessors of power. Thus, to be a successful hunter one must have more power than the animals he hunts and at the same time he must propitiate them so that they will allow themselves to be killed for mankind's benefit. Thus the Washo view animals as a combination of fellow, powerful magician, and willing sacrifice. As such, animals must be treated with respect and viewed with awe.

195
825
231 Much of this attitude is summed up in the Washo usage of the word musěge, which in its simplest translation means wild beast or dangerous beast. However, further probing of the many connotations of the word reveals that this is applied to any hunted animal, large or small, which eludes or outwits the hunter. Thus a bear is inherently musěge; but a deer, or even a squirrel, is musěge only if he manages to show his superiority to

195
the hunter or more particularly to the hunter's medicine. Moreover, musěge 231
is also applied to men who displayed aggressive power as hunters, warriors 825
or in modern times, men who are bad-tempered. Finally, musěge is the
common Washo term used in reference to the most powerful and dangerous
and inexplicable of animals, the white man. By extension the attitude ap- 231
pears to cover also the white man's livestock -- large, often dangerous ani- 825
mals that destroy wild plant foods, and for whose control are required new
(and difficult to acquire) skills. The Indian's fear of domestic animals when 177
he was first confronted with horses and cattle is clear from Cortez's inva-
sion of the 16th century to the Blackfeet in the 18th and 19th centuries (Ewers,
1955), and the Pit River tribes of the 1860's and 70's, (de Angulo, 1950). If
we recall that Washo enmity toward white men -- the commercial sheep [154]
grazers who lease the pinenut allotment lands, for instance -- is apt to be
couched in terms of hostility toward the sheep rather than the sheep herder,
we see yet another extension of this admittedly vague but nonetheless real
identification of animals and men. In short, the white man and his animals
appear never to have been clearly distinguished from one another. More- [789]
over the ritual or magical skills of aboriginal Washo life, which enabled the
Washo to deal with the native fauna, were of no use in dealing with domestic
livestock. One cannot view a sheep or cow or horse as semisacred and at
the same time carry out the tasks necessary to the proper conduct of hus-
bandry. At this point the example of Hindu India, where the cow is con-
sidered so sacred that the millions of bovines on the subcontinent cannot con-
tribute their full potential to the welfare of human society, may help illustrate
the point I am attempting to make about the Washo. Essentially what has hap-
pened in the Washo case is that the Washo have not succeeded in making a
clear distinction between domestic animals and wild animals, and therefore,
have not been able to adjust their own behavior in terms of domestic-wild
categories. This failure to draw these distinctions has made it difficult for
the Washo to undertake any real husbandry activities.

However, in the final paragraphs of this paper, it might be well to 231
see exactly what the Washo have or have not rejected. Clearly the Washo 177
have not rejected or failed to incorporate domestic livestock. The Washo
language borrowed or developed words for all the more common domestic
animals. The Washo willingly eats beef, veal, pork, bacon or ham, although
he tends to reject mutton and lamb. There are within Washo culture clear- [262]
cut patterns of behavior that direct actions concerning domestic animals.
Moreover, in the recent past many Washo developed the skill necessary to
ride and drive horses, although this skill was soon lost with the invention of
the automobile. What the Washo failed to develop were the attitudes and
skills necessary for animal husbandry as distinguished from "domestication"
or "domestic animals."

177 The Washo example serves to illustrate how varied the response to a particular complex of behavior can be. It serves, if nothing more, as a warning that it is not possible from the nature of the introduced behavior to [231] easily anticipate what the response in the receiving culture will be. It further suggests that the subject of response to animal husbandry among Indian tribes outside the more well known and dramatic area of the Great Plains may shed meaningful light on the process, and on the effects of the diffusion of animal husbandry in the New World.

Notes

600

1. Dogs were used for hunting in early historic times and presumably aboriginally.

231
177
541

2. This reflects one of the dominant themes of white culture in the West. Cattle raising is one of the major industries. Moreover, it is an activity with prestige. The romanticized figure of the cowboy is dominant throughout the area. In Gardnerville amateur ropers form one of the largest and most active recreational groups, and rodeo is a major spectator sport.

5

Bibliography

113

Cook, Sherborne F.

1941 The Mechanism and Extent of Dietary Adaptation among Certain Groups of California and Nevada Indians. Ibero-Americana, Vol. 18.

1960 Colonial Expeditions to the Interior of California's Central Valley, 1800-1820. University of California Anthropological Records, Vol. 16, pp. 239-92.

Downs, James F.

1960 Domestication: An Examination of the Changing Relationships between Man and Animals. Kroeber Anthropological Society Papers, No. 22, pp. 18-67.

1961a The Effect of Animal Husbandry on Two North American Indian Tribes. Ph. D dissertation, University of California, Berkeley.

1961b Washo Religion. University of California Anthropological Records, Vol. 16, No. 9, pp. 365-85.

1961c The Origin and Spread of Riding in the Near East and Central Asia. American Anthropologist, Vol. 63, No. 6, pp. 1193-1203.

de Angulo, Jaime

1950 Indians in Overalls. Hudson Review, Vol. 3, No. 3, pp. 327-77. New York.

Ewers, John C.

1955 The Horse in Blackfoot Indian Culture. Bureau of American Ethnology, Bulletin, No. 159.

Lowie, Robert H.

1939 Ethnographic Notes on the Washo. University of California Publications in American Archaeology and Ethnology, Vol. 36, pp. 301-52.

Steward, Julian

1955 Theory of Culture Change. University of Illinois Press, Urbana.

113 Numerous incidents reported in the Press have been cited. These are drawn from editions of the following newspapers: Carson Valley Courier-Record, Genoa Courier and the Genoa Record. Copies of these newspapers published from 1858 to date are on file in the office of the County Clerk, Minden, Douglas County, Nevada. A domestic accident destroyed the notes, making it impossible to supply more precise bibliographic information.

AN ANNOTATED BIBLIOGRAPHY OF WASHO SOURCES

by Warren L. d'Azevedo and John A. Price

113
[121]

Two major objectives have guided the preparation of this bibliography: (1) systematization of the sources of information concerning a little known group of the western Great Basin, and (2) demonstration of the value of intensive bibliographic research in disclosing the wide range of written comment and data that frequently remains unexamined in the course of standard ethnographic work. Though this bibliography can make no claim to exhaustive coverage, it does represent the product of a number of years of consistent interest in a specific people, and will prove to be a research aid of considerable utility for those conducting anthropological investigation in the area.

113
128

No attempt has been made to present complete annotation for all entries, or to evaluate them according to a scale of worth. When a work is sufficiently well known, or a title provides adequate description of content, editorial comment has not been added. This is also true of a number of entries included for the general background they afford regarding history and characteristics of the region the Washo have inhabited. Whenever the Washo have been referred to in significant context, however, note is made of this fact. Much of the annotation reflects the specialized interests of the compilers insofar as the material has been collected in connection with particular research projects over a period of time. For this reason, even the more lengthy and detailed descriptions can do no more than suggest the full value of the respective works as sources of data for other students.

The bibliography has been organized into five categories. The section entitled Anthropology contains sources that provide data concerning the ethnology, language, archeology, and anthropometry of the Washo. A following section of Unpublished materials has been included as a convenient guide to manuscripts, field notes and collections. The section on History comprises works in which the Washo are discussed in the context of early historical relations of the region or which offer evidence pertinent to a definition of their changing social milieu. The entries under Ecology have been found to be the most useful references on the physiographic and biological aspects of the area. The final section of General materials includes a wide variety of works concerning peoples adjacent to the Washo, or works that are especially significant for comparative purposes. Also included are a number of entries that were not appropriate to any of the other categories, but contain material of peripheral interest.

128
The compilers wish to acknowledge the contributions of Stanely A.
Freed, Omer C. Stewart and Gordon L. Grossacup, who generously shared
the results of their own scholarship during initial preparation of this bibliog-
raphy. The many hours of painstaking assistance provided at various times
122 by Kay Sweeney and James F. Downs are also gratefully noted. Financial
aid from the Bollingen Foundation and the University of Utah Faculty Research
Fund has supported much of the basic research of which this bibliography is,
in part, a result.

113

Abbreviations

AA	*American Anthropologist.*
BAE-AR	*Bureau of American Ethnology - Annual Report.*
BAE-B	*Bureau of American Ethnology - Bulletin.*
IJAL	*International Journal of American Linguistics.*
JAFL	*Journal of American Folk Lore.*
UC-AR	*University of California Anthropological Records.*
UCAS-R	*University of California Archaeological Survey Reports.*
UCPAAE	*University of California Publications in American Archaeology and Ethnology.*

ANTHROPOLOGY

Anonymous
1948 The Basketry of Dat-So-La-Lee. *The Nevada Magazine,* Vol. 3, No. 9, pp. 8-9. Minden, Nevada.

Contains photographs and a short text concerning the famous Washo basket maker. Also includes a Lovelock Cave basket detail.

1951, 1956 *Pioneer Nevada*. Harold's Club, Reno, Nevada. Vols. I and II.

A collection of about 350 myths, and historical anecdotes, some Washo.

Atwater, Jane
1954 Washo Indians. *Nevada State Journal,* January 31, 1954.

Avery, B. P.
1873 Chips from an Indian Workshop. *Overland Monthly*, Vol. 2, No. 6, pp. 489-93. Reprinted in Heizer and Elsasser, 1953 (q.v.), *UCAS-R*, No. 21, pp. 33-6.

Ethnographic, archeological, and other comments concerning the Sierra Nevada, particularly in the vicinity of Lake Tahoe.

Bancroft, Hubert Howe
1883 The Native Races. The Wild Tribes. *The Works of Hubert Howe Bancroft*, Vol. 1. The History Co., San Francisco.

See pp. 423, 469 for location of Washo; p. 466 for location of Paiute.

1883 The Native Races. Myths and Languages. *The Works of Hubert Howe Bancroft,* Vol. 3. D. Appleton & Co., New York.

See pp. 89-90 for a Washo flood myth; p. 170 for "Nevada" idea of a great Spirit; pp. 524-5 for "Nevada" ideas on life after death; p. 568 lists Washo as "Utah"-speaking members of the "Shoshones."

N3

Barrett, Samuel Alfred

1908 The Geography and Dialects of the Miwok Indians. *UCPAAE*, Vol. 6, No. 2, pp. 333-68.

See pp. 347-9 for information on "Washo territory" on the western slope of the Sierra Nevada in the vicinity of Big Trees.

1917 The Washo Indians. *Bulletin of the Public Museum of the City of Milwaukee*, Vol. 2, No. 1, pp. 1-52.

Predominantly concerned with material culture, but includes material on land use, social organization and tribal location. Major ethnographic source.

Barrett, Samuel A., and Edward W. Gifford

1933 Miwok Material Culture. *Publications of the Museum of the City of Milwaukee*, Bull. 2, No. 4.

Includes notes on trade with the Washo.

Baumhoff, M. A., R. F. Heizer and A. B. Elsasser

1958 The Lagomarsino Petroglyph Group (Site 26-St-1) Near Virginia City, Nevada. *UCAS-R*, No. 43, Pt. 2, pp. 1-17.

P. 2 indicates lack of Washo or Paiute knowledge of the origin of the petroglyphs.

Beals, Ralph L.

1933 Ethnology of the Nisenan. *UCPAAE*, Vol. 31, No. 6, pp. 335-414.

P. 336 contains a map of Nisenan territory. Mentions wars caused by Washo trespass in acorn gathering grounds.

Bennyhoff, James A.

1958 A Trial Correlation of Culture and Chronology. *In* "Current Views on Great Basin Archaeology," *UCAS-R*, No. 42, pp. 1-112.

Includes a tentative chronology for Martis (2500 B.C. -- A.D. 500) and Kings Beach (A.D. 1000 -- Washo and Maidu).

Birdsell, Joseph B.
1951 The Problem of the Early Peopling of the Americas as Viewed from Asia. In The Physical Anthropology of the American Indian, William S. Laughlin (Ed.), pp. 1-68.

On pp. 48-9 Washo are included with Pomo, Karok, Shasta, Achomawi, Atsugewi, Yana and other peoples tentatively classified as Hokan-speaking who are "notable for absence of Ainu-like traits" among Great Basin and California groups.

Bright, William
1960 Animals of Acculturation in the California Indian Languages. University of California Publications in Linguistics, Vol. 4, No. 4, pp. 215-46.

Contains numerous Washo terms taken from published and unpublished sources.

Cartwright, William D.
1952 A Washo Girl's Puberty Ceremony. Proceedings of the Thirtieth International Congress of Americanists, pp. 136-42. London.

(See also "Peyote," pp. 143-8 of the same volume.)

Cohn, C. Amy
1909 Arts and Crafts of the Nevada Indians. Nevada Historical Society Biannual Report, Vol. 1, pp. 75-9.

P. 77 includes war with the Paiutes and the technique of basket making used by Dat-So-La-Lee.

Cook, Sherborne F.
1941 The Mechanism and Extent of Dietary Adaptation among Certain Groups of California and Nevada Indians. Ibero-Americana, Vol. 18, pp. 1-59.

Washo food preferences and practice of "begging" for food.

Culin, Stewart
1907 Games of the North American Indians. BAE-AR, Vol. 24, No. 199.

Includes Hudson's notes on Washo games.

113

Curtis, Edward S.
1926 The North American Indian, Vol. 15. Plimpton Press, Norwood, Mass. (In 20 vols. published from 1907-1930.)

For location of Washo see pp. 57, 89; population, pp. 91-2; war, pp. 67, 76, 90, 96; land use, pp. 94-5; political organization, p. 95. Also see pp. 123-56 for myths of Mono, Paviotso and Washo; pp. 167-72 for ethnographic summaries; pp. 182-92 for vocabularies.

Dangberg, Grace
1927 Washo Texts. UCPAAE, Vol. 22, No. 3, pp. 391-443.

Daugherty, Richard D.
1954 Notes and News: Pacific Coast. American Antiquity, Vol. 19, No. 3, p. 310.

Passing reference to UCAS ethnographic work with Washo and the connection between Kings Beach complex and Washo.

Davis, James T.
1961 Trade Routes and Economic Exchange among the Indians of California. UCAS-R, No. 54.

Washo trade items in exchange with neighboring groups, p. 42; two maps of trade routes, p. 71 ff.

DeWitt-Warr, Vernille
1913 Destitute Nevada Indians. In The History of Nevada, Sam P. Davis (Ed.), pp. 132-61.

Includes a list of names of Washo people prior to 1913 and the places they lived. Quotes from an 1861 report by the Indian Agent, Warren Wasson, to Governor Nye.

Dixon, Roland B.
1902 Maidu Myths. American Museum of Natural History Bulletin, Vol. 17, Pt. 11, pp. 33-118.

See pp. 33-4 for information on Washo-Maidu contact.

113

1905 The Northern Maidu. American Museum of Natural History Bulletin, Vol. 17, Pt. 3, pp. 119-346. (The Huntington California Expedition.)

Pp. 124-5 give location of Washo, Washo land use and location of Maidu (with map); Washo-Maidu trade, p. 201.

Dixon, Roland B., and Alfred L. Kroeber

1903 The Native Languages of California. AA, Vol. 5, No. 1, pp. 1-26.

Includes Washo in a survey of linguistic characteristics.

1907 Numeral Systems of the Languages of California. AA, Vol. 9, No. 4, pp. 663-90.

Includes Washo in a survey of numeral systems.

1919 Linguistic Families of California. UCPAAE, Vol. 16, No. 3, pp. 47-118.

Pp. 104-12 present evidence for including Washo in the Hokan family.

Downs, James F.

1961 Washo Religion. UC-AR, Vol. 16, No. 9.

A valuable recent study of Washo religious beliefs and ritual.

1961 Effect of Animal Husbahdry on Two American Indian Tribes: Washo and Navaho. Ph.D dissertation, University of California, Berkeley.

This work contrasts the economy, reaction to white contact and change in these two Indian groups.

Driver, Harold E.

1941 Culture Element Distributions: XVI, Girl's Puberty Rites in Western North America. UC-AR, Vol. 6, No. 2, pp. 21-90.

Includes Washo form of this rite from Stewart's (1941) data in a general statistical study.

113 Driver, Harold E., and William C. Massey
1957 Comparative Studies of North American Indians. *Transactions of the American Philosophical Society*, n.s., Vol. 47, Pt. 2, pp. 165-456.

Brief comparison of Washo "moieties" with those of the Pomo, Mono and Eastern Yokuts, p. 411.

DuBois, Cora
1939 The 1870 Ghost Dance. *UC-AR*, Vol. 3, No. 1, pp. 1-151.

See p. 1.

Eichler, Lillian
1924 *The Customs of Mankind*. Doubleday, Page and Co., New York, N. Y.

Description of Washo girl's puberty dance, pp. 172-73..

Elsasser, Albert B.
1960 The Archaeology of the Sierra Nevada in California and Nevada. *UCAS-R*, No. 51, pp. 1-93.

A major work on archeology in the Washo area; reviews the Martis-Kings Beach sequence and describes three excavated Martis complex sites. Includes photographs of 171 artifacts (mostly stone points) from Washo territory; extensive bibliography.

Freed, Stanley A.
1960 Changing Washo Kinship. *UC-AR*, Vol. 14, No. 6, pp. 349-418.

A detailed study of Washo kinship behavior and changing terminology. An outstanding study of Washo social organization and of the ethnology of the western Great Basin.

Gatschet, A. S.
1882 Indian Languages of the Pacific States and Territories. *Magazine of American History*, Vol. 8, pp. 254-63.

One of the earlier statements about the Washo language. Location of the Washo and discussion of local Indian-white relations, p. 255.

113

1890 Ethnographic Sketch of the Klamath People. Contributions to North American Ethnography, Vol. 2, Pt. 1.

Location of Washo boundary, p. xiv.

Gifford, Edward W.

1922 California Kinship Terminologies. UCPAAE, Vol. 18, No. 1, pp. 1-285.

Mono kinship terminologies, pp. 45-52; grandparent and cousin terms of Washo and Paviotso, pp. 130, 163.

1926 Californian Anthropometry. UCPAAE, Vol. 22, No. 2, pp. 217-390.

Includes the measurement and description of 16 living individuals of purported Washo descent and several others of mixed Washo descent, in a general survey and classification of California anthropometric types.

1951 California Indian Physical Types. In The California Indian: A Source Book, R. F. Heizer and M. A. Whipple (Eds.), pp. 82-7. University of California Press, Berkeley and Los Angeles.

Gordon, G. B.

1919 The Richard Waln Meirs Collection. The Museum Journal, Vol. 10, Nos. 1 and 2, pp. 26-8.

Illustrates Washo baskets with comments on their raw materials and designs. Also states the location and population of Washo.

Haglund, E. A., et al.

1961 The Washoe, Paiute and Shoshone Indians of Nevada. Nevada Department of Education, Carson City, Nevada.

A summary of the history, education, and health of the Nevada Indians.

Heizer, Robert F.

1958 Aboriginal California and Great Basin Cartography. UCAS-R, No. 41, Paper 63, pp. 1-9.

113 Heizer, Robert F., and Albert B. Elsasser
1953 Some Archaeological Sites and Cultures of the Central Sierra Nevada. *UCAS-R*, No. 21, pp. 1-42.

An important archeological statement on Washo territory. Describes pre-Washo (Martis) and Washo (Kings Beach) archeological complexes from a brief survey in the vicinity of Lake Tahoe. Appendices: Boatstones in California; High Altitude Occupation in the Yosemite Region, by J. A. Bennyhoff; Chips from an Indian Workshop, by B. P. Avery; Ethnographic Notes on Washo Culture, S. L. Lee.

Hinkle, George, and Bliss Hinkle
1949 *Sierra-Nevada Lakes*. The American Lake Series. Bobbs-Merrill Co., Indianapolis.

See pp. 48, 114, 134-7, 256-62, 270-1 for references to Washo.

Hodge, Frederick Webb (*Ed.*)
1910 Handbook of American Indians North of Mexico. *BAE-B*, No. 30, Vol. 2.

Location of Washo and Washo "war" with the Paiutes, p. 920.

Jacobsen, William H., Jr.
1958 Washo and Karok: An Approach to Comparative Hokan. *IJAL*, Vol. 24, No. 3, pp. 195-212.

James, George Wharton
1902 *Indian Basketry*. 2nd ed., Henry Malkan, New York, N. Y.

Brief mention of Paiute and Washo basketry, especially that of Dat-So-La-Lee.

1903 Basket Makers of California at Work. *The Basket*, Vol. 1, No. 3, pp. 2-18. Pasadena, California.

Intrusion of Paiutes into California, Washo basketry, pp. 6-8. Includes a few illustrations of Washo baskets.

1921 *The Lake of the Sky, Lake Tahoe.* 2nd ed., Radiant Life Press, Pasadena, California. Reprinted in 1956 by Powner Co., Chicago, Ill.

113

Pp. 26-71 claims the use of rock "inscriptions" as boundary markers by the Washo and Paiute; supposed Paiute prohibition of Washo use of horses; also see pp. 111-12 and pp. 191-2 for mention of Washo.

Kennedy, K. A. R.
1959 The Aboriginal Population of the Great Basin. UCAS-R, No. 45, pp. 1-84.

A survey of Great Basin anthropometry and a comparison with peripheral areas; includes Gifford's Washo sample.

Klimek, Stanislaw
1935 Culture Element Distributions: I, The Structure of California Indian Culture. UCPAAE, Vol. 37, No. 1, pp. 1-70.

Includes Washo in a survey of languages, coefficients of cultural similarity, and historical depth.

Kroeber, Alfred Louis
1907 The Washo Language of East Central California and Nevada. UCPAAE, Vol. 4, No. 5, pp. 251-318.

A morphological sketch of Washo language. Location of Washo, pp. 252-3; location of neighbors, p. 253; narrative of a Washo-Paiute battle while hunting deer, pp. 302-3.

1908 On the Evidences of the Occupation of Certain Regions by the Miwok Indians. UCPAAE, Vol. 6, No. 3, pp. 369-80.

Miwok-Washo boundary problem, p. 376.

1916 California Place Names of Indian Origin. UCPAAE, Vol. 12, No. 2, pp. 31-69.

Lake Tahoe, p. 60, and Tallac, p. 61, mentioned as Washo.

1917 California Kinship Systems. UCPAAE, Vol. 12, No. 9, pp. 339-96.

Washo discussed, pp. 362-5.

1920 Games of the California Indians. AA, Vol. 22, No. 1, pp. 272-7.

113

Mentions Washo double ball game, and the regular and four stick hand game.

1922 Elements of Culture in Native California. UCPAAE, Vol. 13, No. 8, pp. 259-328.

Washo noted as having the Plains form of sweat house, cremation, counting by 5's and 10's, the Ghost Dance of 1890, and the girl's ceremony at adolescence with singing and dancing.

1947 Cultural and Natural Areas of Native North America. UCPAAE, Vol. 38, pp. 1-242.

Washo placement in areas, territory size, population density, pp. 53, 191, 207, 137.

1953 Handbook of the Indians of California. California Book Company, Berkeley. (Photolithographic facsimile of the work published in 1925 as BAE-B, No. 78.)

Brief summary of Washo ethnology (affiliations, habitat, numbers, culture, basketry, dress and implements, buildings, religion and society) pp. 569-73; comparison of girls' puberty ceremony among Washo and California Indians, pp. 864-5; ritual numbers and numerical system, p. 877; Washo population in California, pp. 883, 886.

1955 Linguistic Time Depths So Far and Their Meaning. IJAL, Vol. 21, No. 2, pp. 91-104.

Includes an evaluation of the glottochronology of the Hokan superstock which shows Washo as off the Pacific axis of Hokan languages and "split off from every other computed Hokan language for 45 C or more."

1957 Ethnographic Interpretations 1-6. UCPAAE, Vol. 47, No. 2, pp. 191-234.

See pp. 218-25 for "California Indian Population About 1910."

Lee, Simeon Lemuel

1934 Dr. S. L. Lee Collection. Nevada State Printing Office, Carson City, Nevada.

113

Includes some notes and anecdotes from the Washo, Shoshoni and Southern and Northern Paiute from Lee's articles and diary, along with an anonymous biography of Dr. Lee, a list of his collections, and a section entitled "Indian Stories and Legends."

Littlejohn, Hugh W.
1929 A Northeastern Californian Dug-Out Canoe. AA, Vol. 31, No. 4, pp. 777-9.

Warfare between Northeastern Maidu and Washo, p. 779.

Lowie, Robert H.
1923 The Cultural Connection of Californian and Plateau Shoshonean Tribes. UCPAAE, Vol. 20, pp. 143-56.

See pp. 154-5 for brief note on Washo kinship terms, and a tale of the Weasel brothers with a Shoshoni-Washo parallel.

1939 Ethnographic Notes on the Washo. UCPAAE, Vol. 36, No. 5, pp. 301-52.

A brief but major ethnographic source on the Washo. Particularly useful for material culture, myths, and general social and religious practices.

Macdonald, Claire
1929 Lake Tahoe, California. William E. Rudge, Mt. Vernon, New York. (privately printed)

Photograph of Washo basketmaker, Suzie, and seven baskets, p. 24.

MacGregor, Gordon
1936 Washo Indians of the Sacramento Jurisdiction. Office of Indian Affairs, Applied Anthropology Unit, Department of the Interior, Washington, D. C. (8 pp. mimeographed)

Problems of and recommendations concerning the Woodfords, Alpine County, California, community of the Washo in 1936.

Mallery, Garrick
1893 Picture-Writing of the American Indians. BAE-AR, No. 10, 1888-1889, pp. 1-822.

Includes a number of petroglyph sites in western Nevada; Pyramid Lake, Reno, Truckee River, Carson River, Hopkins Soda Springs, Fallon, Virginia City, etc. P. 93 reads "This region has been roamed over by the Washo Indians from a remote period, but none of them know anything of these works."

Mason, Otis T.
1904 Aboriginal American Basketry: Studies in a Textile Art without Machinery. United States National Museum, Annual Report for 1902, Vol. 1, pp. 171-784; Vol. 2, Pls. 1-248.

Washo basketry, Vol. 1, pp. 466-7; Vol. 2, plates.

McAllester, David P.
1949 Peyote Music. Viking Fund Publication in Anthropology, No. 13, pp. 1-104.

Discussion of Washo Peyote songs, pp. 54-6; text and scores of Washo Peyote songs, Appendix, pp. 31-40.

Merriam, Alam P., and Warren L. d'Azevedo
1957 Washo Peyote Songs. AA, Vol. 59, No. 4, pp. 615-41.

Washo Peyotism, the instruments and criteria of musical performance, and an analysis of the Peyote song-cycles.

Merriam, C. Hart
1905 The Indian Population of California. AA, Vol. 7, No. 4, pp. 594-606.

Washo mentioned in population estimate for 1834.

1907 Distribution and Classification of the Mewan Stock. AA, Vol. 9, No. 2, pp. 338-57.

Map on p. 338 shows North Miwok at Grizzley Flats; Washo boundary, p. 334.

1955 Studies of California Indians. Department of Anthropology, University of California (Ed.). University of California Press, Berkeley and Los Angeles.

113

Brief mentions of Washo basketry, trade, and territory, pp. 50, 62, 122, 154. See pp. 71-6 for "The Mono Paiute," pp. 66-70 for "The Mewuk."

Mooney, James

1896 The Ghost-Dance Religion and the Sioux Outbreak of 1890. BAE-AR, No. 14, 1892-1893, Pt. 2.

Brief mentions of Washo and Northern Paiute throughout. Western Nevada origin of Ghost Dance, pp. 701-4, 764-76; Washo population and distribution, p. 804; contradictory population and distribution figures, pp. 1051-2. Also Washo-Paiute relations, Washo subsistence activity, impact of whites.

1928 The Aboriginal Population of America North of Mexico. Smithsonian Miscellaneous Collections, Vol. 80, No. 7.

Washo population for 1845 and 1907, p. 20. Mentions extensive epidemics, wars, and large-scale murders and massacres decimating the Indian population between 1845 and 1869.

Murphey, Edith Van Allen

1959 Indian Uses of Native Plants.

Contains some Washo names and uses of plants in a sketchy ethnobotanical report on Nevada.

Myles, M. T.

1930 Washo Baskets. Overland Monthly, No. 88, p. 265.

Olmsted, D. L.

1959 Palaihnihan and Shasta III: Dorsal Stops. Language, Vol. 35, No. 4, pp. 637-44.

Contains Washo words taken from Jacobsen, 1958, and Kroeber, 1907.

Park, Willard Z.

1938 The Organization and Habitat of Paviotso Bands. In "Tribal Distributions in the Great Basin." AA, Vol. 40, No. 4, pp. 622-6.

Location of Paviotso and Washo, Washo-Paviotso wars over territory, and Paviotso land use and ownership.

113

1941 Culture Succession in the Great Basin. *In Language, Culture, and Personality*, Leslie Spier (*Ed.*), pp. 180-203.

Deals with the nature and diffusion of dances in the Great Basin including Paviotso, Washo, Shoshone and South Paiute.

Payen, L. Arthur

1959 Petroglyphs of Sacramento and Adjoining Counties, California. *UCAS-R*, No. 48, pp. 66-83.

Pettitt, George A.

1946 Primitive Education in North America. *UCPAAE*, Vol. 43, No. 1, pp. 1-182.

See p. 62 for Washo use of nicknames.

Powell, John Wesley

1891 Indian Linguistic Families of America North of Mexico. *BAE-AR*, No. 7.

See p. 131 for discussion of "Washo language family."

Powers, Stephan

1875 *The Life and Culture of the Washo and Paiutes.* Unpublished MS, Bureau of American Ethnology, catalog no. 808.

See p. 1.

1876 Centennial Mission to the Indians of Western Nevada and California. *Smithsonian Institution, Annual Report*, pp. 449-60.

Location and population of Washo, Paiutes and Mono, Washo-Paiute war, Paiute pinenut locations and rules of trespass, pp. 452-3.

Riddell, Francis A.

1960 Honey Lake Paiute Ethnography. *Nevada State Museum, Anthropological Papers*, No. 4.

Numerous references to Washo use of Honey Lake area; Washo ethnogeographic notes, p. 82.

Royce, Charles C.
1896-7 Indian Land Cessions in the U.S. *BAE-AR*, No. 18, Pt. 2, pp. 521-949, and maps.

Location of Washo and government reserves, pp. 836-7 and Maps 8, 43. (Identifying number on maps for Washo is 473.)

Rust, H. N.
1897 Tom the Arrowmaker. *Land of Sunshine*, Vol. 8, pp. 13-15. (Essentially the same material in "Survivals of the Stone Age," *The Antiquarian*, Vol. 1, pp. 284-5, 1897, by the same writer, and quoted in Squier, 1953, p. 24.)

The works of one of the last of the Washo bow and arrow craftsmen.

Sample, L. L.
1950 Trade and Trails in Aboriginal California. *UCAS-R*, No. 8, pp. 1-30.

Washo and Maidu trail data from notes by W. Evans and F. Riddell, and data on Washo trade with Maidu and Miwok from S. A. Barrett and E. W. Gifford.

Sapir, Edward
1917 The Status of Washo. *AA*, Vol. 19, No. 3, pp. 449-50.

Linguistic relations of Washo and Hokan.

1921 Supplementary Note on Salinan and Washo. *IJAL*, Vol. 2, pp. 68-72.

Schellbach, Louis
1927 A Bone Implement of the Washo. *Museum of the American Indian, Heye Foundation, Indian Notes*, Vol. 4, No. 4, pp. 400-3.

Scotch, Norman A.
1957 *A Methodological Model for the Anthropological Study of Disease: Essential Hypertension in Three Societies.* Ph.D dissertation, Northwestern University, Evanston.

The section on the Washo contains ethnographic and medical information based upon direct field observation and testing.

113 Simpson, J. H.
1869 The Shortest Route to California, Illustrated by a History of Exploration of the Great Basin of Utah with Its Topographical and Geological Character and Some Account of the Indian Tribes. J. B. Lippincott & Co., Philadelphia.

Washo location, population, land use, and Paiute location, pp. 48-9.

Siskin, Edgar E.
1938 Washo Territory. AA, Vol. 40, No. 4, pp. 626-7.

Location of Washo, land use and seasonal round, territorial divisions, location of neighboring peoples.

1941 The Impact of the Peyote Cult upon Shamanism among the Washo Indians. Ph.D dissertation, Yale University, New Haven.

Squier, Robert J.
1953 The Manufacture of Flint Implements by the Indians of Northern and Central California. UCAS-R, No. 19, Paper 20, pp. 15-32.

Washo method according to H. N. Rust, 1897, p. 24.

Steward, Julian H.
1929 Petroglyphs of California and Adjoining States. UCPAAE, Vol. 24, No. 2, pp. 47-238.

Petroglyphs in Washo territory, pp. 65-70, 139-45..

1933 Ethnography of the Owens Valley Paiute. UCPAAE, Vol. 33, No. 3, pp. 233-350.

Location of Washo, p. 235.

Stewart, Omer C.
1939 The Northern Paiute Bands. UC-AR, Vol. 2, No. 3, pp. 127-49.

Aboriginal Washo territory -- Northern Paiute boundary.

113

1939 Washo-Northern Paiute Peyotism. Proceedings of the Fifth Pacific Science Congress, Vol. 6, No. 4, pp. 65-8. Toronto.

1941 Culture Element Distributions: XIV, Northern Paiute. UC-AR, Vol. 4, No. 3, pp. 361-446.

An important source, includes a listing of Washo culture elements in addition to Northern Paiute and Achomawi.

1944 Washo-Northern Paiute Peyotism: A Study in Acculturation. UCPAAE, Vol. 40, No. 3, pp. 63-142.

Swadesh, Morris
1954 Time Depths in American Linguistic Groupings. AA, Vol. 56, pp. 361-4.

Indicates the divergence of Washo-Comecrudo and Washo-Jicaque.

Tax, Sol (Ed.)
1960 The North American Indians, 1950 Distribution of Descendants of the Aboriginal Population of Alaska, Canada and the United States. Map prepared by the Department of Anthropology, University of Chicago.

Dresslerville population given as 170, Washo population given as 799. Some of the figures given are misleading and inaccurate.

Taylor, Alex S.
1960 The Indianology of California. The California Farmer, Vol. 13, June 22, 1860, 138.

Location and population of Washo.

Train, Percy, James R. Henricks and W. Andrew Archer
1941 Medicinal Uses of Plants by Indian Tribes of Nevada. Contributions Toward a Flora of Nevada, No. 33. U. S. Department of Agriculture. (mimeographed)

Data on medicinal use of Nevada plants by Washo and other groups; short Washo word list, pp. 26-7.

A3

U.S. Bureau of Indian Affairs
1948
Program of the Carson Indian Agency Jurisdiction, Nevada-California. (mimeographed)

Agency records, summary of program, description of Washo social and economic conditions, history of the reservation areas and Federal programing, economic data on families, differences arising between Washo and Nevada stockmen regarding Pinenut Range lands.

U.S. House of Representatives, Subcommittee on Indian Affairs of the Committee on Public Lands
1950 *A compilation of Material Relating to the Indians of the United States and the Territory of Alaska, Including Certain Laws and Treaties Affecting Such Indians*, June 13, 1950, Serial 30.

Washo reservation acreage and population estimated in the 1930's, p. 91; history of Washo reservation and land allotments, pp. 240-1; statistics on lands, resources, employment, health, education, and material conditions of the Washo, pp. 846-7, 853; description of the charter and constitution of the Washo Tribe of Nevada and California approved January 24, 1936, p. 1044.

Weltfish, Gene
1930 Coiled Gambling Baskets of the Pawnee and Other Plains Tribes. *Museum of the American Indian, Heye Foundation, Indian Notes*, Vol. 7, No. 3.

Comparative statement on the use of baskets for dice games and Culin's (1907, p. 199) information on the Washo use of a winnowing basket for their dice games, p. 293.

1932 Problems in the Study of Ancient and Modern Basket-Makers. *AA*, Vol. 34, No. 1, pp. 108-17.

See p. 115 for note on Washo basketry.

Wissler, Clark
1931 Observation on the Face and Teeth of the North American Indians. *American Museum of Natural History, Anthropological Papers*. Vol. 33, Pt. 1, pp. 1-33.

Includes data on living Washo children.

UNPUBLISHED

13

Anonymous
n. d. The Lost and Forgotten Tribe: The Washoe Indian Tribe. Mimeographed and distributed by Fritz L. Kramer, Department of Geography, University of Oregon.

An unusual and important document written by a young Washo woman as a university term paper. It constitutes the only instance -- within the knowledge of the bibliographers -- of a written description of modern Washo life and attitudes by a member of the group.

Bancroft, Hubert Howe
1881 Early History of Carson Valley. MS., 5 pp. (call no. P-F 16, Bancroft Library, Berkeley; microfilm no. 67, Treasure Room, University of Utah Library.)

Deals with the period 1850-1857.

Bigler, Henry William
1872 Diary of a Mormon in California--Discovery of Gold 1848. MS. (call no. C-D 45, Bancroft Library, Berkeley. Complete journal with extracts concerning missionary experiences and an account of life in "The Union" on microfilm no. 76, Treasure Room, University of Utah Library.)

Notes taken from the author's diary between 1846 and 1848 concerning prospecting on the American River, Mormon wagon trains from Salt Lake City to California; immigrants and Indian raids.

Blackburn, Abner
n. d. Reminiscences. MS. Quoted in The Humboldt, Dale L. Morgan (1943).

n. d. Narrative of Experiences, 1837-51. MS. (call no. C-D 5007, Bancroft Library, Berkeley.)

Comments by an early settler in Carson Valley.

Conover, Peter Wilson
n. d. Journal, 1840-1875. MS. Utah State Historical Society, Salt Lake City.

113

Accounts of the recall of Mormons from Carson Valley to Salt Lake City.

Cradlebaugh, William M.
1883 Nevada Biography, San Francisco. MS, 5 pp. (call no. P-G 3, Bancroft Library, Berkeley; microfilm no. 65, Treasure Room, University of Utah Library.)

Notes concerning early settlements and mining in western Nevada.

Dangberg, Grace
1917-1920 Field Notes: language, folklore, material culture, social organization, and shamanism.

1919 Ethnographic Field Notes on the Washo Indians. MS.

d'Azevedo, Warren L.
1952-55, 1959-60 Field Notes: general ethnological data, social organization, territorial distribution, peyotism.

1956 Washo Place Names. MS.

n. d. A Contribution to the Ethnohistory of the Washo. (In preparation.)

Dodge, J. (Indian Agent)
1859 Letter to Jacob Forney, Esq., Superintendent of Indian Affairs, Utah Territory, Jan. 4, 1859. B.I.A., Utah Superintendency, L.R. 1859, D-635.

Downs, James F.
1959 Field Notes.

n. d. Non-Herders; The Washo, Part II: The Effects of Animal Husbandry on Two American Indian Tribes. (In preparation.)

n. d. Washo Hunting Techniques. (In preparation.)

Freed, Stanley A.
1952-57 Field Notes.

General ethnographic data regarding aboriginal and modern Washo culture. An emphasis on social organization.

1954 Washo Habitation Sites in the Lake Tahoe Area. MS. (6 pp. and map on file, Dept. of Anthropology, California Archaeological Survey, University of California, Berkeley.) 113

A discussion of Washo season round, fishing techniques, preparation of fish, and location of campsites on Lake Tahoe.

Freed, Ruth S.
1953-57 Field Notes.

Unpublished data on social organization, modern teen-age Washo, and life histories.

Grosscup, Gordon L.
1954 Northern Paiute Archeology. MS.

A compilation of regional archeological site materials pertinent to prehistoric occupation of Northern Paiute.

Hamlin, Alfred Street
1918 The Federal Policy in Relation to the Nevada Indians. Master's thesis, University of California.

Huffaker, Granville W.
1883 Early Cattle Trade in Nevada. MS. (call no. P-G 5, Bancroft Library, Berkeley; microfilm no. 65, Treasure Room, University of Utah Library.)

Notes of H. H. Bancroft from Huffaker's narration concerning the early cattle business in Truckee Meadows and Steamboat Valley with descriptions of settlements in the 1850's and 60's.

Hurt, Garlund
1856 Letter to His Excellency Brigham Young, Governor and Ex Officio Superintendent of Indian Affairs, Utah Territory, September, 1856. D.I.A., Utah Superintendency, L.R. 1856, U-13.

Jacobsen, William H., Jr.
1958 Washo Basic Vocabulary. MS. Department of Linguistics, University of California. (14 pp., 450 items.)

113

n. d. Structural Characteristics of Hokan Languages. MS.

A structural nongenetic comparison of five languages: Washo, Yuma, Karok, Yana, and Kashaya (S. W. Pomo).

n. d. Internal Reconstruction in Washo. Dept. of Linguistics, University of California, Berkeley. (mimeographed)

Lee, S. L.
1912 Original Basket Catalogue. (MS journal in the collection of the Nevada State Museum, Carson City, Nevada.)

The original handwritten annotation made by Dr. Lee to his extensive collection of Washo and other Indian materials during his long residence in the Carson Valley area. Collection presented to the Nevada State Museum in 1934.

Malloy, William D.
1931 Carson Valley 1857-1867. Master's thesis, University of California, Berkeley.

Merriam, C. Hart
1904 Vocabularies of North American Indians: Washoo. MS.

1904 and 1935 Field Check Lists, Pacific Coast Region, Wah-shoo. U.S. Department of Agriculture, Biological Survey. MS.

1950 Field Notes and Other Ethnographic Materials (including those listed above). Department of Anthropology, University of California, Berkeley.

Nevada State Museum, Carson City, Nevada
n. d. The Dr. West Collection.

Petroglyph tracings from Nevada and California sites. Unfortunately many of these are not annotated or given precise location. The tracings from Modoc territory are most complete.

Price, John A.

1961 Field Notes. Material culture, technology, ethnohistory and economic organization.

1962 Washo Economy. Master's thesis, University of Utah.

Reese, John

1884 Mormon Station. MS. Notes dictated to an interviewer in Salt Lake City. (call no. P-G 11, Bancroft Library, Berkeley; Vol. 1, pp. 186-90, Nevada Historical Society Papers; microfilm no. 65, Treasure Room, University of Utah Library.)

Concerned with early settlers in Nevada, Mormon Station in Carson Valley, and trading, mining and ranching of Mormons and others in 1851-1859.

Smith, Martin

1935 Field Notes. (See reference to this material in Omer C. Stewart, "Washo-Northern Paiute Peyotism.")

Stewart, Omer C.

1936-1938 Field Notes.

Extensive detailed observations concerning Washo life during this period, and numerous biographies of Peyotists and others.

Van Sickle, H.

1883 Utah Desperadoes. MS. 12 pp. (call no. P-F 37, Bancroft Library, Berkeley; microfilm no. 67, Treasure Room, University of Utah Library).

Material on early events in Carson Valley.

Wall, Claude Leon

1952 History of Indian Education in Nevada from 1861 to 1951. Master's thesis, University of Nevada, Reno.

Witt, Edgar E., Louis J. O'Marr and William M. Holt

1959 The Washoe Tribe v. The United States, Findings of Fact. Indian Claims Commission, Docket No. 288.

HISTORY

Anonymous
n. d. *Romantic Heritage of Douglas-Alpine.* California Interstate Telephone Co.

Angel, Myron (Ed.)
1958 *Reproduction of Thompson and West's History of Nevada, 1881.* (Originally published by Thomas H. Thompson and Albert A. West, 1881; reproduced by Howell-North, Berkeley, 1958.)

Includes details of early explorers Jed Smith, Ogden, Sublette, Kit Carson, and Fremont and the Cooper and Donner parties; settlement of Carson Valley, pp. 31-6; location of Washo and Washo-white warfare, pp. 147-8; Washo-Paiute relations, p. 150; settlement of Washo Valley, p. 192.

Bancroft, Hubert Howe
1889 *History of California.* Vol. 6 of *The Works of Hubert Howe Bancroft.* The History Co., San Francisco.

1890 *History of Nevada, Colorado, and Wyoming.* Vol. 25 of *The Works of Hubert Howe Bancroft.* The History Co., San Francisco.

Location of Washo and Washo war with whites, pp. 206-7.

Barnes, A. J.
1877 *Report of A. J. Barnes, U.S. Indian Agent, Nevada.* (See Report of the Commissioner of Indian Affairs.)

Bashford, Herbert, and Harr Wagner
1927 *A Man Unafraid, the Story of John Charles Fremont.* Harr Wagner Publishing Co., San Francisco.

Account of an early trip through western Nevada from Oregon to California by way of Pyramid Lake, pp. 102-24.

Beattie, Hampton S.
1884 The First in Nevada. *Nevada Historical Society Papers,* Vol. 1, pp. 168-71.

113

Interview between H. Bancroft and H. S. Beattie involving the latter's experiences and observations of the first settlement in the Carson Valley between the years 1849 and 1853. No mention of the Washo Indians.

Beckwith, E. G.
1854 Report of Exploration for a Route for the Pacific Railroad, On the Line of the Forty-First Parallel of North Latitude. In Reports of Explorations and Survey, to Ascertain the Most Practicable and Economical Route for a Railroad from the Mississippi River to the Pacific Ocean, Vol II, Senate, 33rd Congress, 2nd Session, Ex. Doc. No. 78, pp. 1-108.

Gosiute, Shoshoni, and Northern Paiute, pp. 20-53.

Bidwell, John
1928 Echoes of the Past about California. Lakeside Press, Chicago, Ill.

Pp. 51-60 refer to a trip along the Humboldt River to the Carson and Walker rivers.

Bigler, Henry W.
1932 Extracts from the Journal of Henry W. Bigler. Utah Historical Quarterly, Vol. 5, Nos. 2, 3, 4.

Accounts of the Mormon Battalion in 1847; travel in Washo territory, pp. 89-92.

Brooks, Juanita
1944 Indian Relations on the Mormon Frontier. Utah Historical Quarterly, Vol. 12, No. 1, pp. 1-48.

1950 The Mountain Meadows Massacre. Stanford University Press, Stanford..

Recall of Mormon settlers from Carson Valley, pp. 17-20. Pp. 191-2 contain a letter of George A. Smith, 1859, with regard to the immigrant policy of shooting Indians, and Indian distinctions between Mormon and "Americats" as friends and enemies respectively.

Camp, Charles L. (Ed.)
1928 James Clyman, American Frontiersman. The Arthur H. Clark Company, Cleveland.

Trek down eastern slope of Sierras from Donner Lake, April-May 1846, pp. 208-12.

Cannon, George Q.
1864 Writings from the "Western Standard." San Francisco.

Orson Hyde appointed to establish and take charge of the settlement in Carson Valley in 1855.

Chever, E. E.
1870 The Indians of California. American Naturalist, Vol. 4, pp. 129-48.

Comments about the Maidu by an early settler.

[illegible] Harrison C.
[illegible]8 The Ashley-Smith Explorations and the Discovery of a Central Route to the Pacific, 1822-1829. Arthur H. Clark Co., Cleveland. (Rev. Ed., Arthur H. Clark Co., Glendale, California, 1941.)

- Comments on the Snake, Shoshoni, Paiute, and Ute; brief mention of Nevada Indians, pp. 186-9, 228-31.

Davis, Samuel Post (Ed.)
1913 History of Nevada. 2 Vols. Elms Publishing Co., Reno.

See also (this bibliography): DeWitt-Warr, Vernille; Ingalls, G. W.; Ewing, Thomas.

Dellenbaugh, Frederick
1914 Fremont and '49. G. P. Putnam's Sons, New York.

Information on both southern and central Nevada Indian groups scattered throughout.

113

De Quille, Dan (William Wright)
1877 History of the Big Bonanza: An Authentic Account of the Discovery, History, and Working of the World Renowned Comstock Silver Lode of Nevada. American Publishing Co., Hartford. (reissued by Alfred A. Knopf, New York, 1947).

See p. 20 for mention of dealings between John Reese and the Washo. Location of Washo, pp. 23, 24, 259 and 415; location of Paiutes, pp. 259, 260.

DeWitt-Warr, Vernille
1913 Destitute Nevada Indians. In History of Nevada, Samuel P. Davis (Ed.), Vol. 1, pp. 132-61. Elms Publishing Co., Reno.

Dodge, J.
1859 Report of Indian Agent J. Dodge. (See under Report of the Commissioner of Indian Affairs.)

Douglas, H.
1870 Report of H. Douglas. (See under Report of the Commissioner of Indian Affairs.)

Ewing, Thomas
1913 Indian Hostilities. In History of Nevada, Samuel P. Davis (Ed.), Vol. 1, pp. 162-89. Elms Publishing Co., Reno.

See p. 185.

Fairfield, Asa Merrill
1916 Pioneer History of Lassen County, California.

Washo and Paiute locations and populations, pp. 13-14.

Farris and Smith (Publishers)
1882 Illustrated History of Plumas, Lassen and Sierra Counties.

See p. 260 for early pioneers in Sierra Valley and raids by the Washo; p. 378 for pioneer fear of Washo; and p. 385 for the "Potato War" of 1857.

Fletcher, Frederick Nathaniel
1929 Early Nevada, The Period of Exploration, 1776-1848. A. Carlisle & Co., Reno.

113

Includes accounts of the Spanish period, Jedediah Smith, Hudson's Bay Co., Bonneville-Walker expedition, Barthleson-Bidwell party, J. C. Fremont expedition.

Fremont, John Charles
1845 Report of the Exploration Expedition to the Rocky Mountains in the Year 1842, and to Oregon and Northern California in the Years 1843-44. Doc. 174, Senate, 28th Congress, 2nd Session, pp. 1-683. (See also Memoirs of My Life, 1887, Vol. 1. 633 pp. Belford, Clarke and Co., Chicago.)

Location of Washo, pp. 169, 221, 225-34.

Hamilton, W. T.
1951 My Sixty Years on the Plains: Trapping, Trading, and Indian Fighting. Long's College Book Co., Columbus, Ohio.

See pp. 159-67, 209, 227-30 for discussion of contacts with Indians.

Hamlin, Herbert (Ed.)
1947 Knott Reminiscences, Early History of Nevada in the 1850's. Pioneer Press, Placerville.

Hopkins, Sarah Winnemucca
1883 Life among the Piutes: Their Wrongs and Claims. G. P. Putnam's Sons, New York.

Account of Mrs. Hopkins, a Northern Paiute, her life and the history of the Northern Paiute. Washo place names, Washo-white hostility, and "Captain Jam" (Jim?) of the Washo, pp. 59-68.

Houghton, Eliza P. Donner
1911 The Expedition of the Donner Party and Its Tragic Fate. A. C. McClurg and Co., Chicago.

Huntington, Oliver B.
1887 A Trip to Carson Valley. In "Eventful Narratives," Faith Promoting Series, Robert Aveson (Ed.), Vol. 13, pp. 77-98. Juvenile Instructor Office, L.D.S. Church, Salt Lake City.

An account of a trip from Salt Lake City to Carson Valley and return in 1854.

113

Ingalls, G. W.
1913 Indians of Nevada, 1825 to 1913. In The History of Nevada, Samuel P. Davis (Ed.), Vol. 1, pp. 20-132. Elms Publishing Co., Reno.

Population figures for 1859, and territory estimate, p. 23; see also pp. 26, 29, 36 (major habitation areas, 1861); Washo basketry, p. 130.

1913 Washo County. In The History of Nevada, Samuel P. Davis (Ed.), Vol. 2. Elms Publishing Co., Reno.

See p. 1004 for discussion of naming of Washo County.

Jennings, William
1884 Carson Valley. Nevada Historical Society Papers, Vol. 1, pp. 178-83.

Johnson, Overton, and William H. Winter
1846 Route across the Rocky Mountains with a Description of Oregon and California in 1843. (Reprinted in 1932 by Princeton University Press.)

See p. 103 for description of Indians on "Truckies River."

Kelly, Charles
1930 Salt Desert Trails: A History of the Hastings Cutoff and Other Early Trails Which Crossed the Great Salt Desert Seeking a Shorter Road to California. Western Printing Company, Salt Lake City.

Short account of Donner party and harassment of emigrants on the Truckee River by Indians, pp. 81-95.

Kern, Edward M.
1876 Journal of Mr. Edward M Kern of an Exploration of the Mary's or Humboldt River, Carson Lake, and Owens River and Lake, in 1845. In Report of Exploration across the Great Basin of the Territory of Utah for Direct Wagon-Route from Camp Floyd to Genoa, in Carson Valley in 1859, by J. H. Simpson, pp. 475-86, Appendix Q. Government Printing Office, Washington, D. C.

Reference to Indians on Walker River near Walker Lake and mention of duck decoys, p. 480.

113

Leonard, Zenas
(See Quaife, 1934, in this section.)

Lillard, Richard G.
1949 Desert Challenge, An Interpretation of Nevada. Alfred A. Knopf, New York.

Contains a historical summary, references to early explorations and settlements, early mining camps, and Indian-white relations.

Loomis, Leander V.
1928 A Journal of the Birmingham Emigrating Company: The Record of a Trip from Birmingham, Iowa, to Sacramento, California, in 1850. Legal Printing Company, Salt Lake City.

See pp. 110-11, 114, 115, 116-23 for notes on pioneer routes in Washo territory.

Mack, Effie Mona
1936 Nevada: A History of the State from the Earliest Times through the Civil War. Arthur H. Clark Co., Glendale.

Description of the Washo, pp. 39-57; location of Washo, p. 40 (from A. L. Kroeber); Washo-Paiute war, p. 50.

1945 Nevada's First House. The Nevada Magazine, Vol. 1, No. 1, Gardnerville, Nevada.

McGlashan, Charles Fayette
1947 History of the Donner Party: A Tragedy of the Sierra. George H. McGlashan and Bliss McGlashan Hinkle (Eds.). Stanford University Press, Stanford.

Morgan, Dale L.
1943 The Humboldt, Highroad of the West. Rinehart, New York.

Effect of white intrusion on Indians of eastern Sierra slope and white-Indian wars in the 1850's and 60's.

Murbarger, Neil
1950 Mother of Nevada. The Salt Lake Tribune, June 18. Salt Lake City.

Notes the payment by Reese of two sacks of flour to "Capt. Jim" of the Washo for land at Mormon Station.

Nevins, Allan (Ed.)
1956 Narratives of Exploration and Adventure by John Charles Fremont. Longmans, Green and Co., New York.

See pp. 343-75 for travels through Washo territory with extensive comments on the Indians. The editorial annotation is a valuable addition to Fremont's account.

Parker, Superintendent
1866 Report of Superintendent Parker. (See under Report of the Commissioner of Indian Affairs.)

Quaife, Milo Milton (Ed.)
1934 Narrative of the Adventures of Zenas Leonard. Lakeside Press, Chicago.

See pp. 106-123 for a trip from Salt Lake City to the Sierra Nevadas in the 1840's, and pp. 197-275 for the return trip with some ethnographic comment.

Reed, James Frazier
1847 Narrative of the Sufferings of a Company of Emigrants in the Mountains of California, in the Winter of '46 and '47. Illinois State Journal, December 9. Springfield.

1871 The Snow-Bound, Starved Emigrants of 1846. Pacific Rural Press, March 25 and April 1.

Remy, Jules
1860 Voyage au Pays des Mormons. E. Dentu, Libraire--editeur, Paris. (English edition is A Journey to Great Salt Lake by Jules Remy and Julius Brenchley, published in 1860 in London.)

The journey took place in 1855. See pp. 24-132 for comments on Washo, Northern Paiute, and Shoshoni; Pahvant, p. 292; Southern Paiute, p. 340.

Report of the Commissioner of Indian Affairs (made to the Secretary of the Interior)
1852 Agent J. H. Holman met Washo near Carson City and Mormon Station.

1856 Agent Garlund Hurt wrote that Washo in Carson City tried to collect rent from the whites.

1859 Agent Jacob Forney met Washo at Honey Lake.

1859 P. 1, Report of Agent J. Dodge, Carson Valley, Utah Territory, January 4, 1859, to Jacob Forney, Superintendent of Indian Affairs, Utah Territory.

1860 Agent F. Dodge.

1861 Agent Warren Wasson.

1863 Agent J. T. Lockhart.

1865-1863 Agent F. Campbell.

1866 P. 115, Report of Superintendent Parker.

1869 Agent H. Douglas.

1870 P. 96, Report of H. Douglas, Major in the U.S. Army, Superintendent of Indian Affairs. Description of Washo settlements and economy, "the most degraded Indians."

1872 Agent C. A. Bateman.

1877 P. 151, Report of Agent A. J. Barnes. Mention of Washo attitude toward U.S. Government and settlers and their "conditions deplorable in extreme -- pitiful beggars."

Schallenberger, Moses
1953 Overland in 1844. In *The Opening of the California Trail*, George R. Stewart (Ed.), pp. 46-84. University of California Press, Berkeley.

See pp. 66-78 for events in Washo territory.

Scrugham, James
1935 *Nevada, A Narrative of the Conquest of a Frontier Land.* 3 vols. American Historical Society, Inc., Chicago.

113

Simpson, James H.
1876 Report of Exploration across the Great Basin of the Territory of Utah for Direct Wagon-Route from Camp Floyd to Genoa, in Carson Valley, in 1859. Engineering Department, U.S. Army, Washington, D. C.

North and central Nevada ethnographic comments, pp. 459-74 and appendices O, P, and Q; location, population, land use, seasonal round, and political organization of the Washo from information supplied by the Indian Agent, Major Dodge, pp. 38, 93-4.

Springmeyer, George
1913 Douglas County. In The History of Nevada, Samuel P. Davis (Ed.), Vol. 2, pp. 810-11.

Thompson, Thomas H., and Albert A. West
1881 History of Nevada. (See Angel, 1958.)

An important historical work with relevant material scattered throughout. Washo raid on Eagle Station in 1853, capture of a 16 year old boy, and two men killed by Washo in 1857, p. 147.

Wistar, Isaac Jones
1914 The Autobiography of Isaac Jones Wistar, Vol. 1. Philadelphia.

Report of contact with two terrified, hungry Washo on the upper Truckee River in 1849.

Woon, Basil
1953 (Newspaper articles on the Washo.) Nevada State Journal, May 5, 1953 and May 31, 1953.

Work Projects Administration
1940 Nevada, A Guide to the Silver State, Binfords and Mort, Portland.

Excellent summary of early explorations and emigrant parties; also of development of white settlements and commerce in the 1850's.

ECOLOGY

Aschman, Homer
1958 Great Basin Climates in Relation to Human Occupation. *In* "Current Views on Great Basin Archaeology," *UCAS-R*, No. 42, pp. 23-40.

Billings, W. Dwight
1945 The Plant Associations of the Carson Desert Region, Western Nevada. *Butler University Botanical Studies*, Vol. 7, Paper 7, pp. 89-123. Indianapolis.

1954 Nevada Trees. *University of Nevada Agricultural Extension Service Bulletin*, No. 94, 2nd ed., pp. 1-125. Reno.

Gromme, Owen J.
1932 A Sojourn among the Wild Fowl of Pyramid Lake, Nevada. *Yearbook of the Public Museum of the City of Milwaukee*, Vol. 10, pp. 268-303.

Includes a description of bird and reptile life around Pyramid Lake in 1927.

Hall, E. Raymond
1946 *Mammals of Nevada*. University of California Press, Berkeley.

Hubbs, Carl L., and Robert R. Miller
1948 The Zoological Evidence in the Great Basin: With Emphasis on Glacial and Postglacial Times. *Bulletin of the University of Utah*, Vol. 38, No. 20, Pt. 2, pp. 13-166.

Correlation between fish distribution and hydrographic history in the desert basins of the western United States.

LaRivers, Ira, and T. J. Trelease
1952 An Annotated Check List of the Fishes of Nevada. *California Fish and Game*, Vol. 38, No. 1, pp. 113-23. Sacramento.

Introduced species and native forms listed.

Linsdale, Jean M.
1936 The Birds of Nevada. *Cooper Ornithological Club, Pacific Coast Avifauna*, No. 23, pp. 1-145. Berkeley.

Russell, R. J.
1926 Climates of California. *University of California Publications in Geography*, Vol. 2, No. 4.

Snyder, John Otterbein
1915-16 The Fishes of the Lahonton System of Nevada and Northeastern California. *Bulletin of the U.S. Bureau of Fisheries*, Vol. 35, pp. 31-86.

Stebbins, Robert C.
1951 *Amphibians of Western North America.* University of California Press, Berkeley.

1954 *Amphibians and Reptiles of Western North America.* McGraw-Hill, New York.

Tidestrom, Ivar
1925 Flora of Utah and Nevada. *Contributions from the U.S. National Herbarium*, Vol. 25, pp. 1-665. Washington.

Van Denburgh, John
1922 The Reptiles of Western North America. *Occasional Papers of the California Academy of Science*, No. 10, 2 vols. San Francisco.

GENERAL

Aginsky, B. W.
1943 Culture Element Distributions: XXIV, Central Sierra. *UC-AR*, Vol. 8, No. 4.

Miwok, Mono and Yokuts.

Bailey, Paul
1957 *Wovoka, The Indian Messiah.* Westernlore Press, Los Angeles.

An account of Jack Wilson, the Northern Paiute proselyter, and the Ghost Dance.

Barrett, S. A.
1919 Myths of the Southern Sierra Miwok. *UCPAAE*, Vol. 16, No. 1, pp. 1-28.

#3

Barber, B.
1941 A Socio-Cultural Interpretation of the Peyote Cult. AA, Vol. 43, No. 4, Pt. 1, pp. 673-5.

Includes a reference to the spread of the Ghost Dance from Northern Paiute groups.

Baumhoff, Martin A.
1957 An Introduction to Yana Archaeology. UCAS-R, No. 40, pp. 1-61.

1958 History of Great Basin Ethnography. In "Current Views on Great Basin Archaeology," UCAS-R, No. 42, pp. 1-6.

Baumhoff, Martin A., and A. B. Elsasser
1956 Summary of Archaeological Survey and Excavation in California. UCAS-R, No. 33, Paper 37, pp. 1-27.

Contains an extensive bibliography on California archeology organized by author, area, and county.

Baumhoff, M. A., and J. S. Bryne
1959 Desert Side-Notched Points as a Time Marker in California. UCAS-R, No. 48, pp. 32-65.

Bean, E. F.
1867 Bean's History & Directory of Nevada County, California. Daily Gazetter and Job Office, Nevada.

P. 28 gives the location of Washo, hypothetically, from an inscription on a rock.

Bennyhoff, J. A.
1956 An Appraisal of the Archaeological Resources of Yosemite National Park. UCAS-R, No. 34, pp. 1-71.

Bennyhoff, J. A., and Robert F. Heizer
1958 Outland Coiled Basketry from Caves of West Central Nevada. UCAS-R, No. 42, pp. 49-59.

1958 Cross-Dating Great Basin Sites by Californian Shell Beads. UCAS-R, No. 42, pp. 60-92.

Bright, William
1955 A Bibliography of the Hokan-Coahuiltecan Languages. *IJAL*, Vol. 21, No. 3, pp. 276-85.

Calkins, Frank W.
n. d. *Washo Pete or, Hunting Stories of the West*. M. A. Donahue & Co., Chicago.

Chamberlain, R. V.
1908 Animal Names and Anatomical Terms of the Goshute Indians. *Proceedings of the Academy of Natural Sciences of Philadelphia*. Vol. 60, pp. 75-103.

1911 The Ethno-Botany of the Gosiute Indians of Utah. *American Anthropological Association Memoir*, No. 2, Pt. 5, pp. 329-405.

Cook, Sherborne F.
1943 The Conflict Between the California Indian and White Civilization. *Ibero-America*, Vol. 24, pp. 1-29.

Excellent analysis of the causes of decline of Indian population on the western slopes of the Sierras and elsewhere in California.

Culin, Stewart
1901 A Summer Trip among the Western Indians. *Bulletin of the Free Museum of Science and Art of the University of Pennsylvania*, Vol. 3, No. 1, pp. 1-22; No. 2, pp. 88-122; No. 3, pp. 143-75.

Curtin, Jeremiah
1909 Achomawi Myths. *JAFL*, Vol. 22, pp. 283-7.

Day, A. Grove
1951 *The Sky Clears, Poetry of the American Indians*. MacMillan Co., New York, N. Y.

Several brief references to the Northern Paiute (Ghost Dance, Wovoka and poetry).

Dixon, Roland B.
1900 Basketry Designs of the Maidu Indians of California. *AA*, n. s., Vol. 2, pp. 266-76.

1900 Some Coyote Stories from the Maidu Indians of California. *JAFL*, Vol. 13, pp. 267-70.

1902 Maidu Myths. *Bulletin of the American Museum of Natural History*, Vol. 17, pp. 33-118.

1903 System and Sequence in Maidu Mythology. *JAFL*, Vol. 16, pp. 32-6.

1904 Some Shamans of Northern California. *JAFL*, Vol. 1 , pp. 33-7.

1905 The Northern Maidu. *Bulletin of the American Museum of Natural History*, Vol. 17, pp. 119-346.

1908 Achomawi and Atsugewi Tales. *JAFL*, p. 159-77.

1908 Notes on the Achomawi and Atsugewi of Northern California. *AA*, Vol. 10, pp. 208-20.

1911 Maidu: An Illustrative Sketch. *BAE-B*, No. 40, Pt. 1, pp. 679-734.

1912 Maidu Texts. *American Ethnological Society*, Vol. 4.

Driver, Harold E.
1937 Culture Element Distributions: VI, Southern Sierra Nevada. *UC-AR*, Vol. 1, No. 2, pp. 53-154.

Trait distributions of the Mono, Yokuts, Kern River, Kawaiisu, Panamint and Owens Valley Paiute.

Eldredge, I. F.
1923 Caterpillars a la Piute. *American Forestry*, Vol. 29, No. 354, pp. 330-2. Washington.

Use of caterpillars for food by Mono Lake Paiute.

Ellsworth, George S.
1954 A Guide to the Manuscripts in the Bancroft Library Relating to the History of Utah. *Utah Historical Quarterly*, Vol. 22, No. 3, pp. 197-247. (Also available as a reprint.)

113

Includes several documents relevant to a study of the Washo. Most are included in this bibliography, listed by author or informant. Microfilm copies of these manuscripts are available in several libraries.

Faye, Paul-Louis
1923 Notes on the Southern Maidu. UCPAAE, Vol. 20, No. 3.

Fenenga, Franklin, and Francis A. Riddell
1949 Excavation of Tommy Tucker Cave, Lassen County, California. American Antiquity, Vol. 14, No. 3, pp. 203-14.

This cave is just north of historic Washo territory.

Garth, Thomas R.
1953 Atsugewi Ethnography. UC-AR, Vol. 14, No. 2, pp. 129-212.

Gayton, A. H.
1948 Yokuts and Western Mono Ethnography. UC-AR, Vol. 10, Nos. 1 and 2, pp. 1-301.

Gifford, Edward W.
1916 Miwok Moieties. UCPAAE, Vol. 12, No. 4, pp. 139-94.

1917 Miwok Myths. UCPAAE, Vol. 12, No. 8, pp. 283-338.

1955 Central Miwok Ceremonies. UC-AR, Vol. 14, No. 4, pp. 261-318.

Gifford, Edward W., and Stanislaw Klimek
1936 Culture Element Distributions: II, Yana. UCPAAE, Vol. 37, No. 2, pp. 71-100.

Grosscup, Gordon L.
1956 The Archaeology of the Carson Sink Area. UCAS-R, No. 33, Paper 43, pp. 58-64.

1957 A Bibliography of Nevada Archaeology. UCAS-R, No. 38, pp. 1-54.

Also includes sections on geographical-biological-historical background, ethnography, physical anthropology, petroglyphs and radiocarbon dates.

113

1960 Culture History of Lovelock Cave, Nevada. *UCAS-R*, No. 32, pp. 1-72.

Hague, Arnold

1877 West Humboldt Region. *In Geological Exploration of the 40th Parallel*, pp. 713-50. Washington.

Use of fly larva in Soda Lake (?) by Indians, p. 749.

Harrington, Mark R.

1933 A Cat-Tail Eater. *The Masterkey*, Vol. 7, No. 5, pp. 147-9.

A report on the use and preparation of cat-tail seeds by the Northern Paiute.

Heizer, Robert F.

1945 Honey-Dew "Sugar" in Western North America. *The Masterkey*, Vol. 19, No. 5, pp. 140-5.

The collecting and use of honey-dew by Southern and Northern Paiute, and other groups.

1950 Kutsavi, A Great Basin Indian Food. *Kroeber Anthropological Society*, No. 2, pp. 35-41.

Use of larvae of *Ephydrahians* for food among Northern Paiute, especially the Mono.

1953 Aboriginal Fish Poisons. *BAE-B*, No. 151, pp. 225-83.

Use of fish poisons among various Nevada groups, pp. 233, 250-2.

Heizer, Robert F., and M. A. Baumhoff

1956 California Settlement Patterns. *Vicking Fund Publications in Anthropology*, No. 23, pp. 32-44.

1959 Great Basin Petroglyphs and Prehistoric Game Trails. *Science*, Vol. 129, No. 3353.

Reports the presence of petroglyph sites along the Walker, Carson and Truckee rivers along routes of deer migration and suggests a connection with hunting magic.

Jennings, Jesse D., and Edward W. Norbeck
1955 Great Basin Prehistory: A Review. *American Antiquity,* Vol. 21, No. 1, pp. 1-11.

Jenson, Andrew
1941 *Encyclopedic History of the Church of Jesus Christ of Latter-day Saints.* Deseret News Publishing Co., Salt Lake City, Utah.

See pp. 571-3 for a section on Nevada.

Jones, Volney H.
1945 The Use of Honey-Dew as Food by Indians. *The Masterkey,* Vol. 19, No. 5, pp. 145-9.

The collecting and use of honey-dew by the Southern and Northern Paiute and other groups.

Kelly, Isabel T.
1932 *Fundamentals of Great Basin Culture.* Ph.D dissertation, University of California, Berkeley.

Kroeber, A. L.
1908 On the Evidences of the Occupation of Certain Regions by the Miwok Indians. *UCPAAE,* Vol. 6, pp. 369-80.

Lamb, Sydney M.
1958 Linguistic Prehistory in the Great Basin. *IJAL,* Vol. 24, No. 2, pp. 95-100.

A study of the prehistory of Utaztekan languages in the Great Basin.

Lord, Elliott
1883 *Comstock Lode and Mining, Comstock Mining and Miners,* Government Printing Office, Washington, D. C.

Loud, Llewellyn L.
1929 Notes on the Northern Paiute. In "Lovelock Cave" by L. L. Loud and M. R. Harrington. *UCPAAE,* Vol. 25, No. 1, pp. 1-183, Appendix 2, pp. 152-64.

Material culture, economy and mythology.

113

Loud, L. L., and M. R. Harrington
1920 Lovelock Cave. UCPAAE, Vol. 25, No. 1, pp. 1-183.

Lowie, Robert H.
1924 Shoshonean Tales. JAFL, Vol. 37, pp. 1-242.

See pp. 200-42 for Northern Paiute tales.

Mack, Effie Mona, and Byrd Wall Sawyer
1946 Our State -- Nevada. Caxton Printers, Caldwell.

Mallery, Garrick
1886 Pictographs of the North American Indian. BAE-AR, No. 4, 1882-1883, pp. 3-256.

See pp. 24-5 for reference to petroglyphs in Nevada.

Malouf, Carling, and A. Arline Malouf
1945 The Effects of Spanish Slavery on the Indians of the Intermountain West. Southwestern Journal of Anthropology, Vol. 1, No. 3, pp. 338-91.

Discusses the effects of Spanish slave trade on Northern and Southern Paiute, Shoshoni and other groups.

McCulloch, Frank
1948 The Golden One. The Nevada Magazine, Vol. 3, No. 9, pp. 20-3. Minden, Nevada.

The Northern Paiute legend concerning the introduction of the horse.

1948 Chief Bullet Proof. The Nevada Magazine, Vol. 3, No. 11, pp. 20-2. Minden, Nevada.

A story of the Ormsby massacre near Nixon.

Merriam, C. Hart
1910 The Dawn of the World: Myths and Weird Tales Told by the Mewan Indians of California. The Arthur H. Clark Co., Cleveland.

1926 The Classification and Distribution of the Pit River Indian Tribes of California. Smithsonian Miscellaneous Collections, Vol. 78, pp. 1-52.

Mormon Diaries, Journals and Life Sketches

n. d. Microfilm copy of about four hundred transcripts of Mormon diaries, journals and life sketches in the Library of Congress prepared by the Historical Records Survey and Federal Writers' Projects in Utah between the years 1935 and the 1940's. (See Ellsworth, 1954). In 13 reels. Call No. P-F 319 Film in the Bancroft Library, Berkeley. Utah State University, Logan, Utah, has a duplicate microfilm collection.

Park, Willard Z.

1934 Paviotso Shamanism. AA, Vol. 36, No. 1, pp. 98-113. (Based largely on informants from Schurz, Nevada.)

1937 Paviotso Polyandry. AA, Vol. 39, No. 2, pp. 366-8.

1938 Shamanism in Western North America: A Study in Cultural Relationships. Northwestern University Studies in the Social Sciences, No. 2.

Paviotso shamanism, pp. 11-71.

Park, Willard Z., et al.

1938 Tribal Distribution in the Great Basin. AA, Vol. 40, No. 4, pp. 622-38.

Notes on organization and habitat of Paviotso bands by Park; Washo groups by Siskin; northern Ute by Cooke; central and southern Nevada by Mulloy; southern Ute by Opler and Kelly; Kawaiisu by Zigmond.

Powell, John Wesley, and G. W. Ingalls

1874 Indian Agencies in Nevada. Senate, 43rd Congress, 1st Session, Ex. Doc. No. 42, pp. 1-44. (Also see Report of Special Commissioner, 1873, pp. 41-74.)

Covers Ute, Goslute, Shoshoni and Northern and Southern Paiute with some census figures.

Powers, Stephan
1877 Tribes of California. *Contributions to North American Ethnology, Department of the Interior, U.S. Geographical Survey of the Rocky Mountain Region*, Vol. 3, pp. 1-635.

Location of Maidu, pp. 282-3; "Nishinam," pp. 282, 313-4; Miwok, p. 346; Mono, p. 397; also other data on these groups, pp. 282-397. See also pp. 321-2 for Paiute-Maidu fight, prisoners, demand for payment in game.

Price, Bertha de L.
n.d. *Legends of Tahoe.*

Sketchy, romanticized versions of six Washo myths.

Riddell, Francis A.
1956 Archaeological Research in Lassen County, California. *UCAS-R*, No. 33, Paper 41, pp. 44-9.

The Karlo site and nearby caves in the Honey Lake region.

1956 Final Report on the Archaeology of Tommy Tucker Cave. *UCAS-R*, No. 35, Paper 44, pp. 1-25.

Description of numerous artifacts from a Lassen County Cave known to have been used by Honey Lake Paiute in historic times.

1956 Summary Report of the Excavation of Tommy Tucker Cave. *University of Utah Anthropological Papers*, No. 26, pp. 63-73.

1958 The Eastern California Border: Cultural and Temporal Affinities. *In* "Current Views on Great Basin Archaeology," *UCAS-R*, No. 42, pp. 41-8.

Includes a summary paragraph on the Martis-Kings Beach sequence.

1960 The Archaeology of the Karlo Site (Las-7), California. *UCAS-R*, No. 53, pp. 1-110.

Sapir, Edward
1908 Luck-stones Among the Yana. *JAFL*, Vol. 21, p. 42.

1910 Song Recitative in Paiute Mythology. JAFL, Vol. 23, pp. 455-72.

1910 Yana Texts. UCPAAE, Vol. 9, pp. 1-235.

1918 Yana Terms of Relationship. UCPAAE, Vol. 13, pp. 153-73.

1923 Text Analysis of Three Yana Dialects. UCPAAE, Vol. 20, No. 15.

Sapir, Edward, and Leslie Spier

1943 Notes on the Culture of the Yana. UC-AR, Vol. 3, No. 3, pp. 239-98.

Linguistic and ethnographic material on this Hokan group 60 mi. north of the Washo.

Scott, Edward B.

1957 The Saga of Lake Tahoe. Sierra-Tahoe Publishing Co., Lake Tahoe.

Steward, Julian H.

1935 Indian Tribes of Sequoia National Park Region. National Park Service, Berkeley.

Trans-Sierra trade, p. 4; Owen's Valley Paiute contact, trade, and intermarriage with tribes west of the Sierra crest, p. 7.

1937 Petroglyphs of the United States. Smithsonian Institution Annual Report, 1936, pp. 405-26.

1937 Linguistic Distributions and Political Groups of the Great Basin Shoshonean. AA, Vol. 39, No. 4, pp. 625-34.

Includes Northern and Southern Paiute, Nevada Gosiute and Shoshoni.

1938 Basin-Plateau Aboriginal Sociopolitical Groups. BAE-B, No. 120, pp. 1-346.

1939 Some Observations on Shoshonean Distributions. AA, Vol. 41, No. 2, pp. 261-5.

113

1939 Changes in Shoshonean Indian Culture. Scientific Monthly, Vol. 49, pp. 524-37.

Deals with Northern and Southern Paiute and Western Shoshoni prehistory and relations to neighboring groups.

1940 Native Cultures of the Intermountain (Great Basin) Area. In "Essays in Historical Anthropology of North America." Smithsonian Miscellaneous Collections, Vol. 100, pp. 445-502.

1941 Culture Element Distributions: XIII, Nevada Shoshoni. UC-AR, Vol. 4, No. 2, pp. 209-359.

Element distributions of the Shoshoni and Northern and Southern Paiute.

Stewart, Omer C.

1937 Northern Paiute Polyandry. AA, Vol. 39, No. 2, pp. 368-9.

1938 Northern Paiute. AA, Vol. 40, No. 3, pp. 405-7.

1961 The Native American Church (Peyote Cult) and the Law. The Denver Westerners Monthly Roundup, Vol. 17, No. 1, pp. 5-18.

Reports on the Nevada court case involving peyote in 1912 and the state law of 1917.

Stone, Margaret

1943 Craftsman of the Pahutes. Desert Magazine, Vol. 6, No. 6, April, pp. 16-19. El Centro.

Ethnographic notes on the Northern Paiute with some mention of Washo and Shoshoni.

Swanton, John R.

1952 The Indian Tribes of North America. BAE-B, No. 145, pp. 1-726.

Historical summary and village names for various Nevada groups, pp. 375-84.

Voegelin, Erminie W.
1942 Culture Element Distributions: XX, Northeast California. UC-AR, Vol. 7, No. 2, pp. 47-251.

Traits of the Klamath, Modoc, Shasta, Atsugewi, Achomawi, Wintu, Maidu and Nisenan.

Waterman, T. T.
1911 The Phonetic Elements of the Northern Paiute Language. UCPAAE, Vol. 10, pp. 13-44.

1918 The Yana Indians. UCPAAE, Vol. 13, No. 2, pp. 35-102.

Whiting, Beatrice Blyth
1950 Paiute Sorcery. Viking Fund Publications in Anthropology, No. 15, pp. 1-110. New York, N. Y.

Williamson, David E. W.
1942 When Major Ormsby Was Killed. Nevada Historical Society Papers, Vol. 4, pp. 1-28. (Reprinted in Pony Express Courier, May and June, 1942.)

Wilson, Walter C.
1956 The Oneness Trail. Exposition Press, New York.

A novel of the Washo Indians, by a resident of Carson City. Contains considerable local lore within a romanticized account of a pristine Washo community. Little direct ethnological value.

Work Projects Administration
1940 Nevada--A Guide to the Silver State. Binfords and Mort, Portland.

Includes material on Nevada Indians, early explorers and trappers, and a large bibliography.

Young, Brigham
1862 Accounts of Brigham Young, Superintendent of Indian Affairs, Utah Territory. 37th Congress, 2nd Session, H. R. Executive Document 29, Government Printing Office, Washington.

527

574

/For festive activities associated with the pinenut dance, see category 535./